MINNESOTA POLLUTION CONTROL AGENCY

Draft

Air Individual Permit

Part 70 Reissuance

06100067-005

Permittee:	**Mesabi Metallics Company LLC**
Facility name:	**Mesabi Metallics Company LLC** 17113 County Rd 58 Nashwauk, MN 55769 Itasca County

Expiration date: [five years from Stage 2 issuance]
* All Title I Conditions do not expire

Stage 1 issuance date – Authorization to Construct and Operate: [month day, year]

Stage 2 issuance date – Part 70 Reissuance: Future Date TBD

Permit characteristics: Federal; Part 70/Major for NSR; NSR Authorization

The emission units, control equipment and emission stacks at the stationary source authorized in this permit reissuance are as described in the submittals listed in the Permit Applications Table.

The conditions included in Stage 1 of this permit action are effective on the Stage 1 Issuance Date shown above. Stage 1 conditions authorize construction and modification of the facility and the operation of the modified emissions units at the address listed above until final action is taken on Stage 2. Air Emission Permit No. 06100067-004 remains effective until the Stage 2 Issue Date.

Beginning on the Stage 2 Issue date, Air Emission Permit No. 06100067-005 supersedes Air Emission Permit No. 06100067-004 and authorizes the Permittee to operate, construct, and modify the stationary source at the address listed above unless otherwise noted in the permit. The Permittee must comply with all the conditions of the permit. Any changes or modifications to the stationary source must be performed in compliance with Minn. R. 7007.1150 to 7007.1500. Terms used in the permit are as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

Unless otherwise indicated, all the Minnesota rules cited as the origin of the permit terms are incorporated into the SIP under 40 CFR § 52.1220 and as such are enforceable by U.S. Environmental Protection Agency (EPA) Administrator or citizens under the Clean Air Act.

Stage 1 Issuance Approval:

Signature: .....

This document has been electronically signed.

for Steven S. Pak, P.E., Manager
Air Quality Permits Section
Industrial Division

for the Minnesota Pollution Control Agency

Stage 2 Issuance Approval:

Signature: .....

This document has been electronically signed.

for Steven S. Pak, P.E., Manager
Air Quality Permits Section
Industrial Division

for the Minnesota Pollution Control Agency

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1. Permit applications table

Title description	Application receipt date	Action number
Administrative Amendment	02/13/2019	06100067-005
Major Amendment	11/21/2025	
Part 70 Reissuance	11/21/2025	

2. Where to send submittals

Send submittals that are required to be submitted to the EPA regional office to:

Chief Air Enforcement
Air and Radiation Branch
EPA Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

Each submittal must be postmarked or received by the date specified in the applicable Table.
Those submittals required by Minn. R. 7007.0100 to 7007.1850 must be certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Other submittals shall be certified as appropriate if certification is required by an applicable rule or permit condition.

Send submittals that are required by the Acid Rain Program to:

U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue NW (6204M)
Washington, D.C. 20460

Send any application for a permit or permit amendment to:

Fiscal Services – 6th Floor
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Also, where required by an applicable rule or permit condition, send to the Permit Document Coordinator notices of:

a. Accumulated insignificant activities
b. Installation of control equipment
c. Replacement of an emissions unit, and
d. Changes that contravene a permit term

Unless another person is identified in the applicable Table, send all other submittals to:

AQ Compliance Tracking Coordinator
Industrial Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Or

Email a signed and scanned PDF copy to:
submitstacktest.pca@state.mn.us
(for submittals related to stack testing)
AQRoutineReport.PCA@state.mn.us
(for other compliance submittals)
(See complete email instructions in "Routine Air Report Instructions Letter" at https://www.pca.state.mn.us/sites/default/files/aq-f6-15.pdf

3. Facility description

The Mesabi Metallics Company LLC facility is located at 17113 County Rd 58, Nashwauk, Itasca County, Minnesota.

Mesabi Metallics Co. LLC (MMCL)—originally known as Minnesota Steel Industries and more recently known as Essar Steel Minnesota, LLC—is currently constructing a taconite mine and pellet production facility on the site of the former Butler Taconite Mining Company (Butler) facility in Nashwauk, Minnesota, which will have the ability to produce both low-flux (or direct-reduction-grade) and high-flux pellets. Presently, the project no longer includes direct reduced iron (DRI) or steel making operations. Construction commenced on the site in 2009, but MMCL has not yet completed construction of the facility and no part of the facility is currently operating. Once operational, MMCL will begin mining in existing Pit 5 after it has completed dewatering of the pit. MMCL designed its facility to use natural gas as the fuel for the indurating furnace and will use diesel fuel to operate mobile mining equipment and emergency engines. In its November 2025 major amendment application, MMCL stated that it anticipates it will substantially complete construction by mid-2026 and will complete full commissioning by the end of 2026.

The MMCL facility includes the mining and crushing area where ore will be mined, crushed, and magnetically separated to prepare it for the concentrator. The permit limits MMCL to 26.2 million long tons per year (LT/yr) of crude ore production. The concentrating area is where the ore will be finely milled and concentrated into a slurry and also includes the tailings basin where MMCL will deposit and store waste material from the concentration process. The permit limits concentrate production to 7.0 million metric tons per year (tonne/yr). After concentration, MMLC will introduce specific additives, such as limestone and bentonite, to the concentrate mixture and form greenballs that it will feed into the indurating furnace to make finished pellets. MMCL will be able to produce both high-flux pellets (blast furnace pellets) and low-flux pellets (DRI-grade pellets) and the permit restricts MMCL to a maximum of 6.5 tonne/yr of high-flux pellet production and 7.0 tonne/yr of DRI-grade pellet production. MMCL will ship finished pellets off-site via rail.

MMCL will control particulate matter (PM), PM less than 10 microns in diameter (PM_{10}), PM less than 2.5 microns in diameter ($PM_{2.5}$), lead, fluorides, and metallic hazardous air pollutant (HAP) emissions from its material handling and processing equipment with fabric filters. For the indurating furnace, MMCL will control PM, PM_{10}, $PM_{2.5}$, lead, and metallic HAP emissions with cyclones and fabric filters; sulfur dioxide (SO_2), sulfuric acid mist, fluorides, hydrogen chloride (HCl), and hydrogen fluoride (HF) emissions with dry gas scrubbers; and mercury emissions with activated carbon injection (ACI). MMCL will also install ultra-low NOx burners on the indurating furnace to reduce the creation of nitrogen oxides (NO_x) emissions. MMCL will control fugitive dust from across its facility through requirements identified in a fugitive dust control plan.

MMCL will also operate secondary panel filters downstream of some of its fabric filters located in the concentrator building, which are outside the scope of the air permit. MMCL will install and operate these secondary panel filters to achieve compliance with U.S. Mine Safety and Health Administration regulations for respirable crystalline silica. These panel filters are not required by the air permit, are not used to meet any applicable requirement, are not used to limit potential emissions, and are not used to reduce emissions for the annual emissions inventory. Because these panel filters are not required by the air permit, MMCL cannot operate them during any required performance test.

With the major amendment, MMCL intends to incorporate multiple facility design changes into the permit due to final engineering design of the facility. This includes new sources and modifications to existing sources across the entire MMCL facility. The permit authorizes the following modifications:

- modifications to exhaust handling system to internally vent emissions and increase in maximum operating capacity for certain ore handling and crushing equipment (EQUI 131, EQUI 140, EQUI 141, EQUI 263, and EQUI 264), pellet handling equipment (EQUI 114, EQUI 124, and EQUI 135), and additive handling and mixing equipment (EQUI 112, EQUI 113, and EQUI 191);

- modifications to exhaust handling system to internally vent emissions and decrease in maximum operating capacity of certain ore handling equipment (EQUI 110, EQUI 111, EQUI 251, EQUI 252, EQUI 333, EQUI 334, EQUI 335, EQUI 336, EQUI 337, EQUI 338, and EQUI 339) and the carbon storage bin (EQUI 122);
- modifications to exhaust handling system to internally vent emissions from certain material storage bins (EQUI 123, EQUI 193, and EQUI 214);
- increase in maximum operating capacity to certain ore handling and crushing equipment (EQUI 132 EQUI 253, EQUI 254, EQUI 255, EQUI 256, and EQUI 262) and pellet handling equipment (EQUI 127 and EQUI 259);
- modifications of existing emergency engines maximum operating capacity (EQUI 138, EQUI 139, EQUI 149, and EQUI 266);
- increase in maximum operating capacities for certain fugitive sources (FUGI 24, FUGI 25, FUGI 30, FUGI 35, FUGI 37, FUGI 38, and FUGI 40);
- modifications to maximum operating capacity to mining area fugitive sources due to changes in updated mine plan (FUGI 13, FUGI 16, FUGI 28, FUGI 31, FUGI 32, FUGI 33, FUGI 34, and FUGI 100); and
- modifications to traffic patterns of paved road and service roads (FUGI 6 and FUGI 20).

The permit authorizes construction of the following new emission units and fugitive sources:

- additive grinding system to allow MMCL to produce crushed limestone and dolomite on-site (EQUI 290, EQUI 291, EQUI 293, EQUI 294, EQUI 295, EQUI 296, EQUI 297, EQUI 298, EQUI 299, EQUI 304, FUGI 85, FUGI 86, FUGI 94, FUGI 95, FUGI 96, and FUGI 97);
- other additive handling sources (EQUI 282, EQUI 283, EQUI 284, EQUI 285, EQUI 288, EQUI 332, EQUI 340, EQUI 341, EQUI 342, EQUI 383, and EQUI 384);
- emergency engines (EQUI 301 and EQUI 302);
- pellet loadout bunker (EQUI 300 and EQUI 303);
- residual silo (EQUI 281);
- ore handling equipment (EQUI 289 and EQUI 343);
- pellet handling equipment (EQUI 286, EQUI 287, EQUI 330, EQUI 331, EQUI 347, EQUI 376);
- emergency conveyor (FUGI 98);
- in-pit ore stockpiling (FUGI 87, FUGI 88, and FUGI 184); and
- pellet stockpile fugitive sources (FUGI 90 and FUGI 99).

4. Summary of subject items

SI ID: Description	Relationship type	Related SI ID: Description
TFAC 1: Mesabi Metallics Co LLC		
ACTV 1: All Insignificant Activities		
COMG 2: Finished Pellet Handling	has members	EQUI 114, EQUI 124, EQUI 127, EQUI 135, EQUI 259, EQUI 286, EQUI 287, EQUI 300, EQUI 303, EQUI 330, EQUI 331, EQUI 347, EQUI 376
COMG 21: Indurating Furnace	has members	EQUI 257, EQUI 258
COMG 23: Ore Crushing & Handling	has members	EQUI 110, EQUI 111, EQUI 131, EQUI 132, EQUI 140, EQUI 141, EQUI 251, EQUI 252, EQUI 253, EQUI 254, EQUI 255, EQUI 256, EQUI 262, EQUI 263, EQUI 264, EQUI 289, EQUI 333, EQUI 334, EQUI 335, EQUI 336, EQUI 337, EQUI 338, EQUI 339, EQUI 343
COMG 26: Continuous Emission Monitors	has members	EQUI 20, EQUI 21, EQUI 24, EQUI 25, EQUI 41, EQUI 43, EQUI 47, EQUI 49, EQUI 410, EQUI 411
COMG 45: Fugitive Sources	has members	FUGI 6, FUGI 13, FUGI 16, FUGI 20, FUGI 24, FUGI 25, FUGI 26, FUGI 27, FUGI 28, FUGI 29, FUGI 30, FUGI 31, FUGI 32, FUGI 33, FUGI 34, FUGI 35, FUGI 36, FUGI 37, FUGI 38, FUGI 39, FUGI 40, FUGI 41, FUGI 42, FUGI 85, FUGI 86, FUGI 87, FUGI 88, FUGI 90, FUGI 94, FUGI 95, FUGI 96, FUGI 97, FUGI 98, FUGI 99, FUGI 100, FUGI 184
COMG 47: Additive Mixing Equipment	has members	EQUI 112, EQUI 113
COMG 48: Pellet Powder Coating Equipment	has members	EQUI 145, EQUI 146
COMG 49: Pellet Bunker Equipment	has members	EQUI 300, EQUI 303
COMG 50: Pellet Discharge Equipment	has members	EQUI 127, EQUI 135
COMG 51: Hearth Layer Separation Equipment	has members	EQUI 135, EQUI 259
COMG 52: Secondary Crusher Line 1 Equipment	has members	EQUI 253, EQUI 343
COMG 53: Secondary Crusher Line 2 Equipment	has members	EQUI 254, EQUI 343
COMG 54: Secondary Crusher Line 3 Equipment	has members	EQUI 255, EQUI 343
COMG 55: Secondary Crusher Line 4 Equipment	has members	EQUI 256, EQUI 343
COMG 56: Primary Crusher Building Equipment	has members	EQUI 131, EQUI 289
COMG 57: Coarse Ore Storage Conveyor Equipment	has members	EQUI 140, EQUI 263
COMG 58: Fine Ore Storage Conveyor Equipment	has members	EQUI 141, EQUI 264
COMG 59: Storage Bin 1	has	EQUI 284, EQUI

SI ID: Description	Relationship type	Related SI ID: Description
Equipment	members	384
COMG 60: Storage Bin 2 Equipment	has members	EQUI 285, EQUI 384
COMG 61: Bentonite Bin Equipment	has members	EQUI 283, EQUI 384
COMG 62: Dolomite Bin Equipment	has members	EQUI 282, EQUI 383
COMG 63: Limestone Bin Equipment	has members	EQUI 191, EQUI 383
COMG 64: Organic Binder and Sodium Carbonate Bins Equipment	has members	EQUI 193, EQUI 214
COMG 65: Hearth Layer Equipment	has members	EQUI 114, EQUI 124, EQUI 135
COMG 66: Product Junction House 4 Equipment	has members	EQUI 331, EQUI 347
COMG 67: Mercury Continuous Emission Monitors	has members	EQUI 407, EQUI 408
EQUI 20: Indurating Furnace Hood Exhaust Stack CO CEMS		
EQUI 21: Indurating Furnace Hood Exhaust Stack SO2 CEMS		
EQUI 24: Indurating Furnace Waste Gas Stack CO CEMS		
EQUI 25: Indurating Furnace Waste Gas Stack SO2 CEMS		
EQUI 37: Hearth Layer Baghouse Leak Detector		
EQUI 41: Indurating Furnace Hood Exhaust Stack O2 CEMS		
EQUI 43: Indurating Furnace Hood Exhaust Stack NOx CEMS		
EQUI 45: Indurating Furnace Hood Exhaust Baghouse Leak Detector		
EQUI 46: Indurating Furnace Waste Gas Baghouse 1 Leak Detector		
EQUI 47: Indurating Furnace Waste Gas Stack O2 CEMS		
EQUI 49: Indurating Furnace Waste Gas Stack NOx CEMS		
EQUI 51: Pellet Discharge Baghouse Leak Detector		
EQUI 53: Hearth Layer Separation Baghouse Leak Detector		
EQUI 107: Indurating Furnace Waste Gas GSA 1 Pressure Drop Monitor		
EQUI 110: Coarse Ore Mill Bay Tunnel 1	sends to	STRU 168: Coarse Ore Mill Bay Tunnel 1 Stack (Internally Vented)
EQUI 110: Coarse Ore Mill Bay Tunnel 1	is controlled by	TREA 68: Coarse Ore Mill Bay Tunnel 1 Baghouse
EQUI 111: Fine Ore Mill Bay Tunnel 1A	sends to	STRU 171: Fine Ore Mill Bay Tunnel 1A Stack (Internally Vented)
EQUI 111: Fine Ore Mill Bay Tunnel 1A	is controlled by	TREA 6: Fine Ore Mill Bay Tunnel 1A Baghouse
EQUI 112: Mixing Conveyor	sends to	STRU 187: Mixing Conveyor Stack (Internally Vented)
EQUI 112: Mixing Conveyor	is controlled by	TREA 139: Mixing Conveyor Baghouse
EQUI 113: Mixer	sends to	STRU 187: Mixing Conveyor Stack (Internally

SI ID: Description	Relationship type	Related SI ID: Description
		Vented)
EQUI 113: Mixer	is controlled by	TREA 139: Mixing Conveyor Baghouse
EQUI 114: Hearth Layer Grate Feed	sends to	STRU 188: Hearth Layer Stack (Internally Vented)
EQUI 114: Hearth Layer Grate Feed	is controlled by	TREA 11: Hearth Layer Baghouse
EQUI 122: Mercury Control Carbon Bin	sends to	STRU 189: Mercury Control Carbon Bin Stack (Internally Vented)
EQUI 122: Mercury Control Carbon Bin	is controlled by	TREA 51: Mercury Control Carbon Bin Baghouse
EQUI 123: Scrubber Control Lime Bin	sends to	STRU 190: Scrubber Control Lime Bin Stack (Internally Vented)
EQUI 123: Scrubber Control Lime Bin	is controlled by	TREA 52: Scrubber Control Lime Bin Baghouse
EQUI 124: Hearth Layer Feed Bin	sends to	STRU 188: Hearth Layer Stack (Internally Vented)
EQUI 124: Hearth Layer Feed Bin	is controlled by	TREA 11: Hearth Layer Baghouse
EQUI 127: Pellet Discharge	sends to	STRU 69: Pellet Discharge Stack
EQUI 127: Pellet Discharge	is controlled by	TREA 16: Pellet Discharge Baghouse
EQUI 131: Primary Ore Crusher	sends to	STRU 158: Primary Crusher Building Stack (Internally Vented)
EQUI 131: Primary Ore Crusher	is controlled by	TREA 150: Primary Crusher Building Baghouse
EQUI 132: Grizzly Scalping Screen	sends to	STRU 59: Grizzly Scalping Screen Stack
EQUI 132: Grizzly Scalping Screen	is controlled by	TREA 1: Grizzly Scalping Screen Baghouse
EQUI 135: Pellet Transfer to Hearth Layer Bin	sends to	STRU 69: Pellet Discharge Stack
EQUI 135: Pellet Transfer to Hearth Layer Bin	sends to	STRU 70: Hearth Layer Separation Stack
EQUI 135: Pellet Transfer to Hearth Layer Bin	sends to	STRU 188: Hearth Layer Stack (Internally Vented)
EQUI 135: Pellet Transfer to Hearth Layer Bin	is controlled in parallel by	TREA 11: Hearth Layer Baghouse
EQUI 135: Pellet Transfer to Hearth Layer Bin	is controlled in parallel by	TREA 16: Pellet Discharge Baghouse
EQUI 135: Pellet Transfer to Hearth Layer Bin	is controlled in parallel by	TREA 17: Hearth Layer Separation Baghouse
EQUI 138: Concentrator Fire Water Supply Pump	sends to	STRU 2: Concentrator Fire Water Supply Pump Stack
EQUI 139: Concentrator Emergency Power Generator	sends to	STRU 3: Concentrator Emergency Power Generator Stack
EQUI 140: Coarse Ore	sends to	STRU 166:

SI ID: Description	Relationship type	Related SI ID: Description
Storage Conveyor		Coarse Ore Storage Conveyor Stack (Internally Vented)
EQUI 140: Coarse Ore Storage Conveyor	is controlled by	TREA 4: Coarse Ore Storage Conveyor Baghouse
EQUI 141: Fine Ore Storage Conveyor	sends to	STRU 167: Fine Ore Storage Conveyor Stack (Internally Vented)
EQUI 141: Fine Ore Storage Conveyor	is controlled by	TREA 5: Fine Ore Storage Conveyor Baghouse
EQUI 145: Powder Coating Unloading	sends to	STRU 17: Powder Coating Handling Stack
EQUI 145: Powder Coating Unloading	is controlled by	TREA 21: Powder Coating Handling Baghouse
EQUI 146: Powder Coating Day Bin		
EQUI 149: Pellet Plant Emergency Power Generator	sends to	STRU 6: Pellet Plant Emergency Power Generator Stack
EQUI 191: Limestone Bin	sends to	STRU 185: Limestone Bin Stack (Internally Vented)
EQUI 191: Limestone Bin	is controlled by	TREA 136: Limestone Bin Bin Vent
EQUI 193: Organic Binder Bin	sends to	STRU 186: Organic Binder and Sodium Carbonate Bins Stack (Internally Vented)
EQUI 193: Organic Binder Bin	is controlled by	TREA 137: Organic Binder and Sodium Carbonate Bins Baghouse
EQUI 214: Sodium Carbonate Bin	sends to	STRU 186: Organic Binder and Sodium Carbonate Bins Stack (Internally Vented)
EQUI 214: Sodium Carbonate Bin	is controlled by	TREA 137: Organic Binder and Sodium Carbonate Bins Baghouse
EQUI 216: Taconite Plant DAS	receives from	EQUI 20: Indurating Furnace Hood Exhaust Stack CO CEMS
EQUI 216: Taconite Plant DAS	receives from	EQUI 21: Indurating Furnace Hood Exhaust Stack SO2 CEMS
EQUI 216: Taconite Plant DAS	receives from	EQUI 24: Indurating Furnace Waste Gas Stack CO CEMS
EQUI 216: Taconite Plant DAS	receives from	EQUI 25: Indurating Furnace Waste Gas Stack SO2 CEMS
EQUI 216: Taconite Plant DAS	receives from	EQUI 37: Hearth Layer Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 41: Indurating Furnace Hood Exhaust Stack O2 CEMS

SI ID: Description	Relationship type	Related SI ID: Description
EQUI 216: Taconite Plant DAS	receives from	EQUI 43: Indurating Furnace Hood Exhaust Stack NOx CEMS
EQUI 216: Taconite Plant DAS	receives from	EQUI 45: Indurating Furnace Hood Exhaust Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 46: Indurating Furnace Waste Gas Baghouse 1 Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 47: Indurating Furnace Waste Gas Stack O2 CEMS
EQUI 216: Taconite Plant DAS	receives from	EQUI 49: Indurating Furnace Waste Gas Stack NOx CEMS
EQUI 216: Taconite Plant DAS	receives from	EQUI 51: Pellet Discharge Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 53: Hearth Layer Separation Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 107: Indurating Furnace Waste Gas GSA 1 Pressure Drop Monitor
EQUI 216: Taconite Plant DAS	receives from	EQUI 217: Grizzly Transfer Tower Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 218: Cobber Rejects Transfer Tower Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 219: Secondary Crusher Line 1 Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 220: Secondary Crusher Line 2 Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 221: Secondary Crusher Line 3 Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 222: Coarse Ore Storage Conveyor Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 223: Ore Dumping Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 224: Grizzly Scalping Screen Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 225: Fine Ore Storage Conveyor Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 226: Coarse Ore Mill Bay Tunnel 1 Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 227: Fine Ore Mill Bay Tunnel 1A Baghouse Leak Detector

SI ID: Description	Relationship type	Related SI ID: Description
EQUI 216: Taconite Plant DAS	receives from	EQUI 233: Product Junction House 4 Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 247: Secondary Crusher Line 4 Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 305: Fine Ore Mill Bay Tunnel 1B Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 309: Fine Ore Mill Bay Tunnel 2A Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 310: Product Junction House 1 Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 311: Fine Ore Mill Bay Tunnel 2B Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 312: Fine Ore Mill Bay Tunnel 3A Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 313: Fine Ore Mill Bay Tunnel 3B Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 314: Coarse Ore Mill Bay Tunnel 2 Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 315: Coarse Ore Mill Bay Tunnel 3 Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 318: Product Junction House 2 Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 319: Product Junction House 3 Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 320: Primary Crusher Building Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 327: Pellet Bunker Tripper Conveyor Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 328: Pellet Bunker Product Conveyor Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 344: Indurating Furnace Waste Gas Multiclone 1 Pressure Drop Monitor
EQUI 216: Taconite Plant DAS	receives from	EQUI 353: Bentonite Receiving Bin 1 Bin Vent Pressure Drop Monitor
EQUI 216: Taconite Plant DAS	receives from	EQUI 354: Bentonite Receiving Bin 2 Bin Vent Pressure Drop Monitor
EQUI 216: Taconite Plant	receives	EQUI 355:

SI ID: Description	Relationship type	Related SI ID: Description
DAS	from	Limestone Bin Bin Vent Pressure Drop Monitor
EQUI 216: Taconite Plant DAS	receives from	EQUI 357: Residual Silo Baghouse Pressure Drop Monitor
EQUI 216: Taconite Plant DAS	receives from	EQUI 358: Dolomite Bin Bin Vent Pressure Drop Monitor
EQUI 216: Taconite Plant DAS	receives from	EQUI 359: Bentonite Bin Bin Vent Pressure Drop Monitor
EQUI 216: Taconite Plant DAS	receives from	EQUI 360: Storage Bin 1 Bin Vent Pressure Drop Monitor
EQUI 216: Taconite Plant DAS	receives from	EQUI 361: Storage Bin 2 Bin Vent Pressure Drop Monitor
EQUI 216: Taconite Plant DAS	receives from	EQUI 362: Bentonite Receiving Bin 3 Bin Vent Pressure Drop Monitor
EQUI 216: Taconite Plant DAS	receives from	EQUI 363: Pneumatic Transport Vent 1 Bin Vent Pressure Drop Monitor
EQUI 216: Taconite Plant DAS	receives from	EQUI 364: Pneumatic Transport Vent 2 Bin Vent Pressure Drop Monitor
EQUI 216: Taconite Plant DAS	receives from	EQUI 369: 5500 Tonne Limestone Storage Bin Bin Vent Pressure Drop Monitor
EQUI 216: Taconite Plant DAS	receives from	EQUI 370: 5500 Tonne Dolomite Storage Bin Bin Vent Pressure Drop Monitor
EQUI 216: Taconite Plant DAS	receives from	EQUI 374: 55 Tonne Day Bin Bin Vent Pressure Drop Monitor
EQUI 216: Taconite Plant DAS	receives from	EQUI 375: Pneumatic Transport Vent 3 Bin Vent Pressure Drop Monitor
EQUI 216: Taconite Plant DAS	receives from	EQUI 377: Pellet Loadout Baghouse Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 385: Mixing Conveyor Baghouse Bag Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 386: Mercury Control Carbon Bin Baghouse Bag Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 387: Scrubber Control Lime Bin Baghouse Bag Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 388: Organic Binder and Sodium Carbonate Bins Baghouse Bag Leak Detector
EQUI 216: Taconite Plant	receives	EQUI 389:

SI ID: Description	Relationship type	Related SI ID: Description
DAS	from	Bentonite Unloading Baghouse 2 Bag Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 390: Bentonite Unloading Baghouse 1 Bag Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 391: Rotary Rail Car Dumper Baghouse Bag Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 392: 2100 Tonne Stone Bin Baghouse Bag Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 393: Train Unloading Conveyor Baghouse Bag Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 394: Overland Conveyor Baghouse Bag Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 395: Limestone and Dolomite Grinding Mill Baghouse Bag Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 396: Indurating Furnace Waste Gas ACI 1 Injection Rate Monitor
EQUI 216: Taconite Plant DAS	receives from	EQUI 397: Indurating Furnace Waste Gas ACI 1 Carrier Gas Flow Rate Monitor
EQUI 216: Taconite Plant	receives	EQUI 398:

SI ID: Description	Relationship type	Related SI ID: Description
DAS	from	Indurating Furnace Waste Gas ACI 2 Injection Rate Monitor
EQUI 216: Taconite Plant DAS	receives from	EQUI 399: Indurating Furnace Waste Gas ACI 2 Carrier Gas Flow Rate Monitor
EQUI 216: Taconite Plant DAS	receives from	EQUI 400: Indurating Furnace Waste Gas GSA 1 Injection Rate Monitor
EQUI 216: Taconite Plant DAS	receives from	EQUI 402: Indurating Furnace Waste Gas GSA 2 Injection Rate Monitor
EQUI 216: Taconite Plant DAS	receives from	EQUI 404: Indurating Furnace Waste Gas GSA 2 Pressure Drop Monitor
EQUI 216: Taconite Plant DAS	receives from	EQUI 405: Indurating Furnace Waste Gas Multiclone 2 Pressure Drop Monitor
EQUI 216: Taconite Plant DAS	receives from	EQUI 406: Indurating Furnace Waste Gas Baghouse 2 Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 407: Indurating Furnace Hood Exhaust Stack Mercury CEMS
EQUI 216: Taconite Plant DAS	receives from	EQUI 408: Indurating Furnace Waste

SI ID: Description	Relationship type	Related SI ID: Description
		Gas Stack Mercury CEMS
EQUI 216: Taconite Plant DAS	receives from	EQUI 409: Powder Coating Handling Baghouse Bag Leak Detector
EQUI 216: Taconite Plant DAS	receives from	EQUI 410: Indurating Furnace Waste Gas Stack Air Flow Rate Monitor
EQUI 216: Taconite Plant DAS	receives from	EQUI 411: Indurating Furnace Hood Exhaust Stack Air Flow Rate Monitor
EQUI 216: Taconite Plant DAS	receives from	EQUI 412: Indurating Furnace Waste Gas GSA 1 Carrier Gas Flow Rate Monitor
EQUI 216: Taconite Plant DAS	receives from	EQUI 413: Indurating Furnace Waste Gas GSA 1 Carrier Gas Flow Rate Monitor
EQUI 217: Grizzly Transfer Tower Baghouse Leak Detector		
EQUI 218: Cobber Rejects Transfer Tower Baghouse Leak Detector		
EQUI 219: Secondary Crusher Line 1 Baghouse Leak Detector		
EQUI 220: Secondary Crusher Line 2 Baghouse Leak Detector		
EQUI 221: Secondary Crusher Line 3 Baghouse Leak Detector		
EQUI 222: Coarse Ore Storage Conveyor Baghouse Leak Detector		
EQUI 223: Ore Dumping Baghouse Leak Detector		
EQUI 224: Grizzly Scalping Screen Baghouse Leak Detector		
EQUI 225: Fine Ore Storage Conveyor Baghouse Leak Detector		
EQUI 226: Coarse Ore Mill Bay Tunnel 1 Baghouse Leak Detector		
EQUI 227: Fine Ore Mill Bay Tunnel 1A Baghouse Leak Detector		
EQUI 233: Product Junction House 4 Baghouse Leak Detector		
EQUI 247: Secondary Crusher Line 4 Baghouse Leak Detector		
EQUI 251: Grizzly Transfer Tower	sends to	STRU 160: Grizzly Transfer Tower Stack (Internally Vented)
EQUI 251: Grizzly Transfer Tower	is controlled by	TREA 47: Grizzly Transfer Tower Baghouse
EQUI 252: Cobber Rejects Transfer Tower	sends to	STRU 165: Cobber Rejects Transfer Tower Stack (Internally Vented)
EQUI 252: Cobber Rejects Transfer Tower	is controlled by	TREA 43: Cobber Rejects Transfer Tower Baghouse
EQUI 253: Secondary Crusher Line 1	sends to	STRU 83: Secondary Crusher Line 1 Stack

SI ID: Description	Relationship type	Related SI ID: Description
EQUI 253: Secondary Crusher Line 1	is controlled by	TREA 42: Secondary Crusher Line 1 Baghouse
EQUI 254: Secondary Crusher Line 2	sends to	STRU 84: Secondary Crusher Line 2 Stack
EQUI 254: Secondary Crusher Line 2	is controlled by	TREA 44: Secondary Crusher Line 2 Baghouse
EQUI 255: Secondary Crusher Line 3	sends to	STRU 85: Secondary Crusher Line 3 Stack
EQUI 255: Secondary Crusher Line 3	is controlled by	TREA 45: Secondary Crusher Line 3 Baghouse
EQUI 256: Secondary Crusher Line 4	sends to	STRU 86: Secondary Crusher Line 4 Stack
EQUI 256: Secondary Crusher Line 4	is controlled by	TREA 46: Secondary Crusher Line 4 Baghouse
EQUI 257: Indurating Furnace Hood Exhaust	is monitored by	EQUI 20: Indurating Furnace Hood Exhaust Stack CO CEMS
EQUI 257: Indurating Furnace Hood Exhaust	is monitored by	EQUI 21: Indurating Furnace Hood Exhaust Stack SO2 CEMS
EQUI 257: Indurating Furnace Hood Exhaust	is monitored by	EQUI 41: Indurating Furnace Hood Exhaust Stack O2 CEMS
EQUI 257: Indurating Furnace Hood Exhaust	is monitored by	EQUI 43: Indurating Furnace Hood Exhaust Stack NOx CEMS
EQUI 257: Indurating Furnace Hood Exhaust	sends to	EQUI 216: Taconite Plant DAS
EQUI 257: Indurating Furnace Hood Exhaust	is monitored by	EQUI 407: Indurating Furnace Hood Exhaust Stack Mercury CEMS
EQUI 257: Indurating Furnace Hood Exhaust	is monitored by	EQUI 410: Indurating Furnace Waste Gas Stack Air Flow Rate Monitor
EQUI 257: Indurating Furnace Hood Exhaust	sends to	STRU 67: Indurating Furnace Hood Exhaust Stack
EQUI 257: Indurating Furnace Hood Exhaust	is controlled by	TREA 13: Indurating Furnace Hood Exhaust Baghouse
EQUI 257: Indurating Furnace Hood Exhaust	is controlled by	TREA 58: Indurating Furnace Low NOx Burner
EQUI 258: Indurating Furnace Waste Gas	is monitored by	EQUI 24: Indurating Furnace Waste Gas Stack CO CEMS
EQUI 258: Indurating Furnace Waste Gas	is monitored by	EQUI 25: Indurating Furnace Waste Gas Stack SO2 CEMS
EQUI 258: Indurating Furnace Waste Gas	is monitored by	EQUI 47: Indurating Furnace Waste Gas Stack O2 CEMS
EQUI 258: Indurating Furnace Waste Gas	is monitored by	EQUI 49: Indurating Furnace Waste Gas Stack NOx CEMS
EQUI 258: Indurating	sends to	EQUI 216:

SI ID: Description	Relationship type	Related SI ID: Description
Furnace Waste Gas		Taconite Plant DAS
EQUI 258: Indurating Furnace Waste Gas	is monitored by	EQUI 408: Indurating Furnace Waste Gas Stack Mercury CEMS
EQUI 258: Indurating Furnace Waste Gas	is monitored by	EQUI 411: Indurating Furnace Hood Exhaust Stack Air Flow Rate Monitor
EQUI 258: Indurating Furnace Waste Gas	sends to	STRU 68: Indurating Furnace Waste Gas Stack
EQUI 258: Indurating Furnace Waste Gas	is controlled in parallel by	TREA 14: Indurating Furnace Waste Gas Multiclone 1
EQUI 258: Indurating Furnace Waste Gas	is controlled by	TREA 15: Indurating Furnace Waste Gas Baghouse 1
EQUI 258: Indurating Furnace Waste Gas	is controlled by	TREA 49: Indurating Furnace Waste Gas Gas Suspension Absorber 1
EQUI 258: Indurating Furnace Waste Gas	is controlled by	TREA 58: Indurating Furnace Low NOx Burner
EQUI 258: Indurating Furnace Waste Gas	is controlled by	TREA 159: Indurating Furnace Waste Gas Activated Carbon Injection 1
EQUI 258: Indurating Furnace Waste Gas	is controlled in parallel by	TREA 173: Indurating Furnace Waste Gas Multiclone 2
EQUI 258: Indurating Furnace Waste Gas	is controlled by	TREA 174: Indurating Furnace Waste Gas Gas Suspension Absorber 2
EQUI 258: Indurating Furnace Waste Gas	is controlled by	TREA 175: Indurating Furnace Waste Gas Activated Carbon Injection 2
EQUI 258: Indurating Furnace Waste Gas	is controlled by	TREA 176: Indurating Furnace Waste Gas Baghouse 2
EQUI 259: Hearth Layer Separation	sends to	STRU 70: Hearth Layer Separation Stack
EQUI 259: Hearth Layer Separation	is controlled by	TREA 17: Hearth Layer Separation Baghouse
EQUI 261: Space Heaters		
EQUI 262: Ore Dumping to Crusher	sends to	STRU 58: Ore Dumping Stack
EQUI 262: Ore Dumping to Crusher	is controlled by	TREA 120: Ore Dumping Baghouse
EQUI 263: Coarse Ore Barn Pile Drop	sends to	STRU 166: Coarse Ore Storage Conveyor Stack (Internally Vented)
EQUI 263: Coarse Ore Barn Pile Drop	is controlled by	TREA 4: Coarse Ore Storage Conveyor Baghouse
EQUI 264: Fine Ore Barn Pile Drop	sends to	STRU 167: Fine Ore Storage Conveyor Stack (Internally Vented)
EQUI 264: Fine Ore Barn Pile Drop	is controlled by	TREA 5: Fine Ore Storage Conveyor Baghouse

SI ID: Description	Relationship type	Related SI ID: Description
EQUI 266: Pellet Plant Fire Water Supply Pump	sends to	STRU 5: Pellet Plant Fire Water Supply Pump Stack
EQUI 281: Residual Silo	sends to	STRU 155: Residual Silo Stack
EQUI 281: Residual Silo	is controlled by	TREA 146: Residual Silo Baghouse
EQUI 282: Dolomite Bin	sends to	STRU 184: Dolomite Bin Stack (Internally Vented)
EQUI 282: Dolomite Bin	is controlled by	TREA 143: Dolomite Bin Bin Vent
EQUI 283: Bentonite Bin	sends to	STRU 183: Bentonite Bin Stack (Internally Vented)
EQUI 283: Bentonite Bin	is controlled by	TREA 144: Bentonite Bin Bin Vent
EQUI 284: Storage Bin 1	sends to	STRU 181: Storage Bin 1 Stack (Internally Vented)
EQUI 284: Storage Bin 1	is controlled by	TREA 145: Storage Bin 1 Bin Vent
EQUI 285: Storage Bin 2	sends to	STRU 182: Storage Bin 2 Stack (Internally Vented)
EQUI 285: Storage Bin 2	is controlled by	TREA 147: Storage Bin 2 Bin Vent
EQUI 286: Product Junction House 2	sends to	STRU 193: Product Junction House 2 Stack (Internally Vented)
EQUI 286: Product Junction House 2	is controlled by	TREA 140: Product Junction House 2 Baghouse
EQUI 287: Product Junction House 3	sends to	STRU 194: Product Junction House 3 Stack (Internally Vented)
EQUI 287: Product Junction House 3	is controlled by	TREA 141: Product Junction House 3 Baghouse
EQUI 288: Bentonite Receiving Bin 3	sends to	STRU 179: Bentonite Receiving Bin 3 Stack (Internally Vented)
EQUI 288: Bentonite Receiving Bin 3	is controlled by	TREA 142: Bentonite Receiving Bin 3 Bin Vent
EQUI 289: Primary Crusher Building Belt Conveyor	sends to	STRU 158: Primary Crusher Building Stack (Internally Vented)
EQUI 289: Primary Crusher Building Belt Conveyor	is controlled by	TREA 150: Primary Crusher Building Baghouse
EQUI 290: Pneumatic Transport Vent 1	sends to	STRU 199: Pneumatic Transport Vent 1 Stack (Internally Vented)
EQUI 290: Pneumatic Transport Vent 1	is controlled by	TREA 151: Pneumatic Transport Vent 1 Bin Vent
EQUI 291: Pneumatic Transport Vent 2	sends to	STRU 200: Pneumatic Transport Vent

SI ID: Description	Relationship type	Related SI ID: Description
		2 Stack (Internally Vented)
EQUI 291: Pneumatic Transport Vent 2	is controlled by	TREA 152: Pneumatic Transport Vent 2 Bin Vent
EQUI 293: Rotary Rail Car Dumper	sends to	STRU 148: Rotary Rail Car Dumper Stack
EQUI 293: Rotary Rail Car Dumper	is controlled by	TREA 122: Rotary Rail Car Dumper Baghouse
EQUI 294: 2100 Tonne Stone Bin	sends to	STRU 149: 2100 Tonne Stone Bin Stack
EQUI 294: 2100 Tonne Stone Bin	is controlled by	TREA 123: 2100 Tonne Stone Bin Baghouse
EQUI 295: 5500 Tonne Limestone Storage Bin	sends to	STRU 150: 5500 Tonne Limestone Storage Bin Stack
EQUI 295: 5500 Tonne Limestone Storage Bin	is controlled by	TREA 124: 5500 Tonne Limestone Storage Bin Bin Vent
EQUI 296: 5500 Tonne Dolomite Storage Bin	sends to	STRU 151: 5500 Tonne Dolomite Storage Bin Stack
EQUI 296: 5500 Tonne Dolomite Storage Bin	is controlled by	TREA 125: 5500 Tonne Dolomite Storage Bin Bin Vent
EQUI 297: Train Unloading Conveyor	sends to	STRU 152: Train Unloading Conveyor Stack
EQUI 297: Train Unloading Conveyor	is controlled by	TREA 126: Train Unloading Conveyor Baghouse
EQUI 298: Overland Conveyor	sends to	STRU 153: Overland Conveyor Stack
EQUI 298: Overland Conveyor	is controlled by	TREA 127: Overland Conveyor Baghouse
EQUI 299: Limestone and Dolomite Grinding Mill	sends to	STRU 154: Limestone and Dolomite Grinding Mill Stack
EQUI 299: Limestone and Dolomite Grinding Mill	is controlled by	TREA 128: Limestone and Dolomite Grinding Mill Baghouse
EQUI 300: Pellet Bunker Tripper Conveyor	sends to	STRU 196: Pellet Bunker Stack
EQUI 300: Pellet Bunker Tripper Conveyor	is controlled by	TREA 148: Pellet Bunker Tripper Conveyor Baghouse
EQUI 301: Emergency Reclaim Pump	sends to	STRU 156: Emergency Reclaim Pump Stack
EQUI 302: Emergency Pit Water Pump	sends to	STRU 157: Emergency Pit Water Pump Stack
EQUI 303: Pellet Bunker Product Conveyor	sends to	STRU 196: Pellet Bunker Stack
EQUI 303: Pellet Bunker Product Conveyor	is controlled by	TREA 149: Pellet Bunker Product Conveyor Baghouse
EQUI 304: 55 Tonne Day Bin	sends to	STRU 198: 55 Tonne Day Bin Stack (Internally Vented)
EQUI 304: 55 Tonne Day Bin	is controlled by	TREA 154: 55 Tonne Day Bin

SI ID: Description	Relationship type	Related SI ID: Description
		Bin Vent
EQUI 305: Fine Ore Mill Bay Tunnel 1B Baghouse Leak Detector		
EQUI 309: Fine Ore Mill Bay Tunnel 2A Baghouse Leak Detector		
EQUI 310: Product Junction House 1 Baghouse Leak Detector		
EQUI 311: Fine Ore Mill Bay Tunnel 2B Baghouse Leak Detector		
EQUI 312: Fine Ore Mill Bay Tunnel 3A Baghouse Leak Detector		
EQUI 313: Fine Ore Mill Bay Tunnel 3B Baghouse Leak Detector		
EQUI 314: Coarse Ore Mill Bay Tunnel 2 Baghouse Leak Detector		
EQUI 315: Coarse Ore Mill Bay Tunnel 3 Baghouse Leak Detector		
EQUI 318: Product Junction House 2 Baghouse Leak Detector		
EQUI 319: Product Junction House 3 Baghouse Leak Detector		
EQUI 320: Primary Crusher Building Baghouse Leak Detector		
EQUI 327: Pellet Bunker Tripper Conveyor Baghouse Leak Detector		
EQUI 328: Pellet Bunker Product Conveyor Baghouse Leak Detector		
EQUI 330: Product Junction House 1	sends to	STRU 192: Product Junction House 1 Stack (Internally Vented)
EQUI 330: Product Junction House 1	is controlled by	TREA 18: Product Junction House 1 Baghouse
EQUI 331: Product Junction House 4	sends to	STRU 195: Product Junction House 4 Stack
EQUI 331: Product Junction House 4	is controlled by	TREA 19: Product Junction House 4 Baghouse
EQUI 332: Pneumatic Transport Vent 3	sends to	STRU 180: Pneumatic Transport Vent 3 Stack (Internally Vented)
EQUI 332: Pneumatic Transport Vent 3	is controlled by	TREA 158: Pneumatic Transport Vent 3 Bin Vent
EQUI 333: Coarse Ore Mill Bay Tunnel 2	sends to	STRU 169: Coarse Ore Mill Bay Tunnel 2 Stack (Internally Vented)
EQUI 333: Coarse Ore Mill Bay Tunnel 2	is controlled by	TREA 134: Coarse Ore Mill Bay Tunnel 2 Baghouse
EQUI 334: Coarse Ore Mill Bay Tunnel 3	sends to	STRU 170: Coarse Ore Mill Bay Tunnel 3 Stack (Internally Vented)
EQUI 334: Coarse Ore Mill Bay Tunnel 3	is controlled by	TREA 135: Coarse Ore Mill Bay Tunnel 3 Baghouse
EQUI 335: Fine Ore Mill Bay Tunnel 1B	sends to	STRU 172: Fine Ore Mill Bay Tunnel 1B Stack (Internally Vented)
EQUI 335: Fine Ore Mill	is controlled	TREA 129: Fine

SI ID: Description	Relationship type	Related SI ID: Description
Bay Tunnel 1B	by	Ore Mill Bay Tunnel1B Baghouse
EQUI 336: Fine Ore Mill Bay Tunnel 2A	sends to	STRU 173: Fine Ore Mill Bay Tunnel 2A Stack (Internally Vented)
EQUI 336: Fine Ore Mill Bay Tunnel 2A	is controlled by	TREA 130: Fine Ore Mill Bay Tunnel 2A Baghouse
EQUI 337: Fine Ore Mill Bay Tunnel 2B	sends to	STRU 174: Fine Ore Mill Bay Tunnel 2B Stack (Internally Vented)
EQUI 337: Fine Ore Mill Bay Tunnel 2B	is controlled by	TREA 131: Fine Ore Mill Bay Tunnel 2B Baghouse
EQUI 338: Fine Ore Mill Bay Tunnel 3A	sends to	STRU 175: Fine Ore Mill Bay Tunnel 3A Stack (Internally Vented)
EQUI 338: Fine Ore Mill Bay Tunnel 3A	is controlled by	TREA 132: Fine Ore Mill Bay Tunnel 3A Baghouse
EQUI 339: Fine Ore Mill Bay Tunnel 3B	sends to	STRU 176: Fine Ore Mill Bay Tunnel 3B Stack (Internally Vented)
EQUI 339: Fine Ore Mill Bay Tunnel 3B	is controlled by	TREA 133: Fine Ore Mill Bay Tunnel 3B Baghouse
EQUI 340: Bentonite Unloading	sends to	STRU 63: Bentonite Unloading Stack
EQUI 340: Bentonite Unloading	is controlled in parallel by	TREA 9: Bentonite Unloading Baghouse 1
EQUI 340: Bentonite Unloading	is controlled in parallel by	TREA 153: Bentonite Unloading Baghouse 2
EQUI 341: Bentonite Receiving Bin 1	sends to	STRU 177: Bentonite Receiving Bin 1 Stack (Internally Vented)
EQUI 341: Bentonite Receiving Bin 1	is controlled by	TREA 138: Bentonite Receiving Bin 1 Bin Vent
EQUI 342: Bentonite Receiving Bin 2	sends to	STRU 178: Bentonite Receiving Bin 2 Stack (Internally Vented)
EQUI 342: Bentonite Receiving Bin 2	is controlled by	TREA 10: Bentonite Receiving Bin 2 Bin Vent
EQUI 343: Secondary Crusher Lines Bin Feed	sends to	STRU 83: Secondary Crusher Line 1 Stack
EQUI 343: Secondary Crusher Lines Bin Feed	sends to	STRU 84: Secondary Crusher Line 2 Stack
EQUI 343: Secondary Crusher Lines Bin Feed	sends to	STRU 85: Secondary Crusher Line 3 Stack
EQUI 343: Secondary Crusher Lines Bin Feed	sends to	STRU 86: Secondary Crusher Line 4 Stack
EQUI 343: Secondary Crusher Lines Bin Feed	is controlled in parallel by	TREA 42: Secondary Crusher Line 1 Baghouse
EQUI 343: Secondary	is controlled	TREA 44:

SI ID: Description	Relationship type	Related SI ID: Description
Crusher Lines Bin Feed	in parallel by	Secondary Crusher Line 2 Baghouse
EQUI 343: Secondary Crusher Lines Bin Feed	is controlled in parallel by	TREA 45: Secondary Crusher Line 3 Baghouse
EQUI 343: Secondary Crusher Lines Bin Feed	is controlled in parallel by	TREA 46: Secondary Crusher Line 4 Baghouse
EQUI 344: Indurating Furnace Waste Gas Multiclone 1 Pressure Drop Monitor		
EQUI 347: Pellet Plant Fines Bin Discharge	sends to	STRU 195: Product Junction House 4 Stack
EQUI 347: Pellet Plant Fines Bin Discharge	is controlled by	TREA 19: Product Junction House 4 Baghouse
EQUI 353: Bentonite Receiving Bin 1 Bin Vent Pressure Drop Monitor		
EQUI 354: Bentonite Receiving Bin 2 Bin Vent Pressure Drop Monitor		
EQUI 355: Limestone Bin Bin Vent Pressure Drop Monitor		
EQUI 357: Residual Silo Baghouse Pressure Drop Monitor		
EQUI 358: Dolomite Bin Bin Vent Pressure Drop Monitor		
EQUI 359: Bentonite Bin Bin Vent Pressure Drop Monitor		
EQUI 360: Storage Bin 1 Bin Vent Pressure Drop Monitor		
EQUI 361: Storage Bin 2 Bin Vent Pressure Drop Monitor		
EQUI 362: Bentonite Receiving Bin 3 Bin Vent Pressure Drop Monitor		
EQUI 363: Pneumatic Transport Vent 1 Bin Vent Pressure Drop Monitor		
EQUI 364: Pneumatic Transport Vent 2 Bin Vent Pressure Drop Monitor		
EQUI 369: 5500 Tonne Limestone Storage Bin Bin Vent Pressure Drop Monitor		
EQUI 370: 5500 Tonne Dolomite Storage Bin Bin Vent Pressure Drop Monitor		
EQUI 374: 55 Tonne Day Bin Bin Vent Pressure Drop Monitor		
EQUI 375: Pneumatic Transport Vent 3 Bin Vent Pressure Drop Monitor		
EQUI 376: Pellet Loadout	sends to	STRU 201: Pellet Loadout Stack
EQUI 376: Pellet Loadout	is controlled by	TREA 170: Pellet Loadout Baghouse
EQUI 377: Pellet Loadout Baghouse Leak Detector		
EQUI 383: Alternative Limestone or Dolomite Deliveries	sends to	STRU 184: Dolomite Bin Stack (Internally Vented)
EQUI 383: Alternative Limestone or Dolomite Deliveries	sends to	STRU 185: Limestone Bin Stack (Internally Vented)
EQUI 383: Alternative Limestone or Dolomite Deliveries	is controlled in parallel by	TREA 136: Limestone Bin Bin Vent

SI ID: Description	Relationship type	Related SI ID: Description
EQUI 383: Alternative Limestone or Dolomite Deliveries	is controlled in parallel by	TREA 143: Dolomite Bin Bin Vent
EQUI 384: Alternative Additive Deliveries	sends to	STRU 181: Storage Bin 1 Stack (Internally Vented)
EQUI 384: Alternative Additive Deliveries	sends to	STRU 182: Storage Bin 2 Stack (Internally Vented)
EQUI 384: Alternative Additive Deliveries	sends to	STRU 183: Bentonite Bin Stack (Internally Vented)
EQUI 384: Alternative Additive Deliveries	is controlled in parallel by	TREA 144: Bentonite Bin Bin Vent
EQUI 384: Alternative Additive Deliveries	is controlled in parallel by	TREA 145: Storage Bin 1 Bin Vent
EQUI 384: Alternative Additive Deliveries	is controlled in parallel by	TREA 147: Storage Bin 2 Bin Vent
EQUI 385: Mixing Conveyor Baghouse Bag Leak Detector		
EQUI 386: Mercury Control Carbon Bin Baghouse Bag Leak Detector		
EQUI 387: Scrubber Control Lime Bin Baghouse Bag Leak Detector		
EQUI 388: Organic Binder and Sodium Carbonate Bins Baghouse Bag Leak Detector		
EQUI 389: Bentonite Unloading Baghouse 2 Bag Leak Detector		
EQUI 390: Bentonite Unloading Baghouse 1 Bag Leak Detector		
EQUI 391: Rotary Rail Car Dumper Baghouse Bag Leak Detector		
EQUI 392: 2100 Tonne Stone Bin Baghouse Bag Leak Detector		
EQUI 393: Train Unloading Conveyor Baghouse Bag Leak Detector		
EQUI 394: Overland Conveyor Baghouse Bag Leak Detector		
EQUI 395: Limestone and Dolomite Grinding Mill Baghouse Bag Leak Detector		
EQUI 396: Indurating Furnace Waste Gas ACI 1 Injection Rate Monitor		
EQUI 397: Indurating Furnace Waste Gas ACI 1 Carrier Gas Flow Rate Monitor		
EQUI 398: Indurating Furnace Waste Gas ACI 2 Injection Rate Monitor		
EQUI 399: Indurating Furnace Waste Gas ACI 2 Carrier Gas Flow Rate Monitor		
EQUI 400: Indurating Furnace Waste Gas GSA 1 Injection Rate Monitor		
EQUI 402: Indurating Furnace Waste Gas GSA 2 Injection Rate Monitor		
EQUI 404: Indurating Furnace Waste Gas GSA 2 Pressure Drop Monitor		
EQUI 405: Indurating Furnace Waste Gas Multiclone 2 Pressure Drop Monitor		
EQUI 406: Indurating Furnace Waste Gas		

SI ID: Description	Relationship type	Related SI ID: Description
Baghouse 2 Leak Detector		
EQUI 407: Indurating Furnace Hood Exhaust Stack Mercury CEMS		
EQUI 408: Indurating Furnace Waste Gas Stack Mercury CEMS		
EQUI 409: Powder Coating Handling Baghouse Bag Leak Detector		
EQUI 410: Indurating Furnace Waste Gas Stack Air Flow Rate Monitor		
EQUI 411: Indurating Furnace Hood Exhaust Stack Air Flow Rate Monitor		
EQUI 412: Indurating Furnace Waste Gas GSA 1 Carrier Gas Flow Rate Monitor		
EQUI 413: Indurating Furnace Waste Gas GSA 1 Carrier Gas Flow Rate Monitor		
FUGI 6: Paved Road Emissions	is controlled by	TREA 82: Paved Roads Dust Suppression
FUGI 13: Out-of-pit Haul Road Emissions	is controlled by	TREA 86: Out-of-pit Haul Roads Dust Suppression
FUGI 16: Crude Ore Loadout		
FUGI 20: Service Road Emissions	is controlled by	TREA 87: Service Roads Dust Suppression
FUGI 24: Grading at Tailings Basin		
FUGI 25: Dozer Activity at Tailings Basin		
FUGI 26: Tailings Basin Wind Erosion		
FUGI 27: Product Stockpile Wind Erosion	is controlled by	TREA 91: Product Stockpile Wind Erosion Dust Suppression
FUGI 28: Overburden/Waste Rock Bulldozer		
FUGI 29: Overburden/Waste Rock Area Wind Erosion		
FUGI 30: Drilling		
FUGI 31: Overburden Loadout		
FUGI 32: Overburden Unloading (Truck)		
FUGI 33: Waste Rock Loadout		
FUGI 34: Waste Rock Unloading (Truck)		
FUGI 35: Drop onto Cobber Rejects Pile		
FUGI 36: Cobber Rejects Pile Wind Erosion		
FUGI 37: Cobber Rejects Pile Loadout		
FUGI 38: Cobber Rejects Unloading (Truck)		
FUGI 39: Cobber Rejects Stockpile Wind Erosion		
FUGI 40: 120K ton Concentrate Stockpile Loading	is controlled by	TREA 88: 120k Ton Concentrate Stockpile Loading Dust Suppression
FUGI 41: 120K ton Concentrate Stockpile Wind Erosion	is controlled by	TREA 89: 120k Ton Concentrate Stockpile Wind Erosion Dust Suppression
FUGI 42: 120K ton Concentrate Stockpile Loadout	is controlled by	TREA 90: 120k Ton Concentrate Stockpile Loadout Dust Suppression

SI ID: Description	Relationship type	Related SI ID: Description
FUGI 84: Mobile Sources		
FUGI 85: Small Limestone and Dolomite Stockpile Wind Erosion	is controlled by	TREA 162: Small Limestone and Dolomite Stockpile Wind Erosion Dust Suppression
FUGI 86: Large Limestone and Dolomite Stockpile Wind Erosion	is controlled by	TREA 165: Large Limestone and Dolomite Stockpile Wind Erosion Dust Suppression
FUGI 87: Ore Stockpile Wind Erosion		
FUGI 88: Ore Pile Loading		
FUGI 90: Product Stockpile Loadout	is controlled by	TREA 168: Product Stockpile Loadout Dust Suppression
FUGI 94: Small Limestone and Dolomite Stockpile Loading	is controlled by	TREA 161: Small Limestone and Dolomite Stockpile Loading Dust Suppression
FUGI 95: Small Limestone and Dolomite Stockpile Loadout	is controlled by	TREA 160: Small Limestone and Dolomite Stockpile Loadout Dust Suppression
FUGI 96: Large Limestone and Dolomite Stockpile Loading	is controlled by	TREA 164: Large Limestone and Dolomite Stockpile Loading Dust Suppression
FUGI 97: Large Limestone and Dolomite Stockpile Loadout	is controlled by	TREA 163: Large Limestone and Dolomite Stockpile Loadout Dust Suppression
FUGI 98: Emergency Product Conveyor from Pellet Discharge		
FUGI 99: Product Stockpile Conveyor		
FUGI 100: In-pit Haul Roads Emissions	is controlled by	TREA 171: In-pit Haul Road Dust Suppression
FUGI 101: Blasting		
FUGI 184: Ore Stockpile Loadout		
STRU 2: Concentrator Fire Water Supply Pump Stack		
STRU 3: Concentrator Emergency Power Generator Stack		
STRU 5: Pellet Plant Fire Water Supply Pump Stack		
STRU 6: Pellet Plant Emergency Power Generator Stack		
STRU 17: Powder Coating Handling Stack		
STRU 58: Ore Dumping Stack		
STRU 59: Grizzly Scalping Screen Stack		
STRU 63: Bentonite Unloading Stack		
STRU 67: Indurating Furnace Hood Exhaust Stack		
STRU 68: Indurating Furnace Waste Gas Stack		
STRU 69: Pellet Discharge Stack		
STRU 70: Hearth Layer Separation Stack		
STRU 83: Secondary Crusher Line 1 Stack		
STRU 84: Secondary		

SI ID: Description	Relationship type	Related SI ID: Description
Crusher Line 2 Stack		
STRU 85: Secondary Crusher Line 3 Stack		
STRU 86: Secondary Crusher Line 4 Stack		
STRU 93: Primary Crusher Building		
STRU 94: Fine Ore Storage Barn		
STRU 95: Grizzly Building		
STRU 96: Grizzly Transfer House		
STRU 97: Recirculating Water & Tailing Pump House		
STRU 98: Filtering Bin and Mixing Building		
STRU 99: Slurry Tank		
STRU 100: Thickener Tank		
STRU 101: Additive Storage Building		
STRU 102: Balling Building (Pellet Building Tier 2)		
STRU 103: Induration Building (Pellet Building Tier 1)		
STRU 104: Hearth Layer Separation Building		
STRU 105: Hood Exhaust Multiclone Building		
STRU 106: Furnace Waste Gas Multiclone Building		
STRU 107: Hood Exhaust Baghouse Building		
STRU 108: Furnace Waste Baghouse (North & South) Building		
STRU 109: Gas Suspension Absorber Building		
STRU 110: Induration Pump House		
STRU 111: Plant Utility		

SI ID: Description	Relationship type	Related SI ID: Description
Facilities Building		
STRU 112: Pellet Storage Bunkers		
STRU 113: Wagon Loading Station		
STRU 114: Warehouse		
STRU 115: Lime Storage Building		
STRU 116: Boiler House		
STRU 118: Coarse Ore Storage Barn		
STRU 119: Concentrator Building		
STRU 145: Secondary Crusher Building		
STRU 148: Rotary Rail Car Dumper Stack		
STRU 149: 2100 Tonne Stone Bin Stack		
STRU 150: 5500 Tonne Limestone Storage Bin Stack		
STRU 151: 5500 Tonne Dolomite Storage Bin Stack		
STRU 152: Train Unloading Conveyor Stack		
STRU 153: Overland Conveyor Stack		
STRU 154: Limestone and Dolomite Grinding Mill Stack		
STRU 155: Residual Silo Stack		
STRU 156: Emergency Reclaim Pump Stack		
STRU 157: Emergency Pit Water Pump Stack		
STRU 158: Primary Crusher Building Stack (Internally Vented)		
STRU 160: Grizzly Transfer Tower Stack (Internally Vented)		

SI ID: Description	Relationship type	Related SI ID: Description
STRU 165: Cobber Rejects Transfer Tower Stack (Internally Vented)		
STRU 166: Coarse Ore Storage Conveyor Stack (Internally Vented)		
STRU 167: Fine Ore Storage Conveyor Stack (Internally Vented)		
STRU 168: Coarse Ore Mill Bay Tunnel 1 Stack (Internally Vented)		
STRU 169: Coarse Ore Mill Bay Tunnel 2 Stack (Internally Vented)		
STRU 170: Coarse Ore Mill Bay Tunnel 3 Stack (Internally Vented)		
STRU 171: Fine Ore Mill Bay Tunnel 1A Stack (Internally Vented)		
STRU 172: Fine Ore Mill Bay Tunnel 1B Stack (Internally Vented)		
STRU 173: Fine Ore Mill Bay Tunnel 2A Stack (Internally Vented)		
STRU 174: Fine Ore Mill Bay Tunnel 2B Stack (Internally Vented)		
STRU 175: Fine Ore Mill Bay Tunnel 3A Stack (Internally Vented)		
STRU 176: Fine Ore Mill Bay Tunnel 3B Stack (Internally Vented)		
STRU 177: Bentonite Receiving Bin 1 Stack (Internally Vented)		
STRU 178: Bentonite Receiving Bin 2 Stack (Internally Vented)		
STRU 179: Bentonite Receiving Bin 3 Stack (Internally Vented)		
STRU 180: Pneumatic Transport Vent 3 Stack (Internally Vented)		
STRU 181: Storage Bin 1 Stack (Internally Vented)		
STRU 182: Storage Bin 2 Stack (Internally Vented)		
STRU 183: Bentonite Bin Stack (Internally Vented)		
STRU 184: Dolomite Bin Stack (Internally Vented)		
STRU 185: Limestone Bin Stack (Internally Vented)		
STRU 186: Organic Binder and Sodium Carbonate Bins Stack (Internally Vented)		
STRU 187: Mixing Conveyor Stack (Internally Vented)		
STRU 188: Hearth Layer Stack (Internally Vented)		
STRU 189: Mercury Control Carbon Bin Stack (Internally Vented)		
STRU 190: Scrubber Control Lime Bin Stack (Internally Vented)		
STRU 192: Product Junction House 1 Stack (Internally Vented)		
STRU 193: Product Junction House 2 Stack (Internally Vented)		
STRU 194: Product Junction House 3 Stack (Internally Vented)		
STRU 195: Product Junction House 4 Stack		
STRU 196: Pellet Bunker Stack		
STRU 198: 55 Tonne Day Bin Stack (Internally Vented)		
STRU 199: Pneumatic Transport Vent 1 Stack (Internally Vented)		
STRU 200: Pneumatic		

SI ID: Description	Relationship type	Related SI ID: Description
Transport Vent 2 Stack (Internally Vented)		
STRU 201: Pellet Loadout Stack		
STRU 202: Pellet Loadout Building		
STRU 204: Limestone Storage Bin		
STRU 205: Rotary Rail Car Dumper Building		
STRU 206: Additive Grinding Stone Storage Bin		
STRU 207: Limestone and Dolomite Grinding Building		
STRU 208: Overland Conveyor Building		
STRU 209: Train Unloading Conveyor Building		
STRU 210: Slurry Tank 2		
STRU 211: Pellet Junction House #1		
STRU 212: Pellet Junction House #2		
STRU 213: Pellet Junction House #3		
STRU 214: Pellet Junction House #4		
STRU 215: Pellet Junction House #5		
STRU 216: Dolomite Storage Bin		
TREA 1: Grizzly Scalping Screen Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 1: Grizzly Scalping Screen Baghouse	is monitored by	EQUI 224: Grizzly Scalping Screen Baghouse Leak Detector
TREA 4: Coarse Ore Storage Conveyor Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 4: Coarse Ore Storage Conveyor Baghouse	is monitored by	EQUI 222: Coarse Ore Storage Conveyor Baghouse Leak Detector
TREA 5: Fine Ore Storage Conveyor Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 5: Fine Ore Storage Conveyor Baghouse	is monitored by	EQUI 225: Fine Ore Storage Conveyor Baghouse Leak Detector
TREA 6: Fine Ore Mill Bay Tunnel 1A Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 6: Fine Ore Mill Bay Tunnel 1A Baghouse	is monitored by	EQUI 227: Fine Ore Mill Bay Tunnel 1A Baghouse Leak Detector
TREA 9: Bentonite Unloading Baghouse 1	sends to	EQUI 216: Taconite Plant DAS
TREA 9: Bentonite Unloading Baghouse 1	is monitored by	EQUI 390: Bentonite Unloading Baghouse 1 Bag Leak Detector
TREA 10: Bentonite Receiving Bin 2 Bin Vent	sends to	EQUI 216: Taconite Plant DAS
TREA 10: Bentonite Receiving Bin 2 Bin Vent	is monitored by	EQUI 354: Bentonite Receiving Bin 2 Bin Vent Pressure Drop Monitor
TREA 11: Hearth Layer Baghouse	is monitored by	EQUI 37: Hearth Layer Baghouse Leak Detector
TREA 11: Hearth Layer Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 13: Indurating Furnace Hood Exhaust Baghouse	is monitored by	EQUI 45: Indurating Furnace Hood

SI ID: Description	Relationship type	Related SI ID: Description
		Exhaust Baghouse Leak Detector
TREA 13: Indurating Furnace Hood Exhaust Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 14: Indurating Furnace Waste Gas Multiclone 1	sends to	EQUI 216: Taconite Plant DAS
TREA 14: Indurating Furnace Waste Gas Multiclone 1	is monitored by	EQUI 344: Indurating Furnace Waste Gas Multiclone 1 Pressure Drop Monitor
TREA 15: Indurating Furnace Waste Gas Baghouse 1	is monitored by	EQUI 46: Indurating Furnace Waste Gas Baghouse 1 Leak Detector
TREA 15: Indurating Furnace Waste Gas Baghouse 1	sends to	EQUI 216: Taconite Plant DAS
TREA 16: Pellet Discharge Baghouse	is monitored by	EQUI 51: Pellet Discharge Baghouse Leak Detector
TREA 16: Pellet Discharge Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 17: Hearth Layer Separation Baghouse	is monitored by	EQUI 53: Hearth Layer Separation Baghouse Leak Detector
TREA 17: Hearth Layer Separation Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 18: Product Junction House 1 Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 18: Product Junction House 1 Baghouse	is monitored by	EQUI 310: Product Junction House 1 Baghouse Leak Detector
TREA 19: Product Junction House 4 Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 19: Product Junction House 4 Baghouse	is monitored by	EQUI 233: Product Junction House 4 Baghouse Leak Detector
TREA 21: Powder Coating Handling Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 21: Powder Coating Handling Baghouse	is monitored by	EQUI 409: Powder Coating Handling Baghouse Bag Leak Detector
TREA 42: Secondary Crusher Line 1 Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 42: Secondary Crusher Line 1 Baghouse	is monitored by	EQUI 219: Secondary Crusher Line 1 Baghouse Leak Detector
TREA 43: Cobber Rejects Transfer Tower Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 43: Cobber Rejects Transfer Tower Baghouse	is monitored by	EQUI 218: Cobber Rejects Transfer Tower Baghouse Leak Detector
TREA 44: Secondary Crusher Line 2 Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 44: Secondary Crusher Line 2 Baghouse	is monitored by	EQUI 220: Secondary Crusher Line 2 Baghouse Leak Detector
TREA 45: Secondary Crusher Line 3 Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 45: Secondary Crusher Line 3 Baghouse	is monitored by	EQUI 221: Secondary Crusher Line 3 Baghouse Leak Detector
TREA 46: Secondary	sends to	EQUI 216:

SI ID: Description	Relationship type	Related SI ID: Description
Crusher Line 4 Baghouse		Taconite Plant DAS
TREA 46: Secondary Crusher Line 4 Baghouse	is monitored by	EQUI 247: Secondary Crusher Line 4 Baghouse Leak Detector
TREA 47: Grizzly Transfer Tower Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 47: Grizzly Transfer Tower Baghouse	is monitored by	EQUI 217: Grizzly Transfer Tower Baghouse Leak Detector
TREA 49: Indurating Furnace Waste Gas Gas Suspension Absorber 1	is monitored by	EQUI 107: Indurating Furnace Waste Gas GSA 1 Pressure Drop Monitor
TREA 49: Indurating Furnace Waste Gas Gas Suspension Absorber 1	sends to	EQUI 216: Taconite Plant DAS
TREA 49: Indurating Furnace Waste Gas Gas Suspension Absorber 1	is monitored by	EQUI 400: Indurating Furnace Waste Gas GSA 1 Injection Rate Monitor
TREA 49: Indurating Furnace Waste Gas Gas Suspension Absorber 1	is monitored by	EQUI 413: Indurating Furnace Waste Gas GSA 1 Carrier Gas Flow Rate Monitor
TREA 51: Mercury Control Carbon Bin Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 51: Mercury Control Carbon Bin Baghouse	is monitored by	EQUI 386: Mercury Control Carbon Bin Baghouse Bag Leak Detector
TREA 52: Scrubber Control Lime Bin Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 52: Scrubber Control Lime Bin Baghouse	is monitored by	EQUI 387: Scrubber Control Lime Bin Baghouse Bag Leak Detector
TREA 58: Indurating Furnace Low NOx Burner	is controlled in series by	TREA 13: Indurating Furnace Hood Exhaust Baghouse
TREA 58: Indurating Furnace Low NOx Burner	is controlled in series by	TREA 14: Indurating Furnace Waste Gas Multiclone 1
TREA 58: Indurating Furnace Low NOx Burner	is controlled in series by	TREA 15: Indurating Furnace Waste Gas Baghouse 1
TREA 58: Indurating Furnace Low NOx Burner	is controlled in series by	TREA 49: Indurating Furnace Waste Gas Gas Suspension Absorber 1
TREA 58: Indurating Furnace Low NOx Burner	is controlled in series by	TREA 159: Indurating Furnace Waste Gas Activated Carbon Injection 1
TREA 58: Indurating Furnace Low NOx Burner	is controlled in series by	TREA 173: Indurating Furnace Waste Gas Multiclone 2
TREA 58: Indurating Furnace Low NOx Burner	is controlled in series by	TREA 174: Indurating Furnace Waste Gas Gas Suspension Absorber 2
TREA 58: Indurating Furnace Low NOx Burner	is controlled in series by	TREA 175: Indurating Furnace Waste Gas Activated Carbon

SI ID: Description	Relationship type	Related SI ID: Description
		Injection 2
TREA 58: Indurating Furnace Low NOx Burner	is controlled in series by	TREA 176: Indurating Furnace Waste Gas Baghouse 2
TREA 68: Coarse Ore Mill Bay Tunnel 1 Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 68: Coarse Ore Mill Bay Tunnel 1 Baghouse	is monitored by	EQUI 226: Coarse Ore Mill Bay Tunnel 1 Baghouse Leak Detector
TREA 82: Paved Roads Dust Suppression		
TREA 86: Out-of-pit Haul Roads Dust Suppression		
TREA 87: Service Roads Dust Suppression		
TREA 88: 120k Ton Concentrate Stockpile Loading Dust Suppression		
TREA 89: 120k Ton Concentrate Stockpile Wind Erosion Dust Suppression		
TREA 90: 120k Ton Concentrate Stockpile Loadout Dust Suppression		
TREA 91: Product Stockpile Wind Erosion Dust Suppression		
TREA 120: Ore Dumping Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 120: Ore Dumping Baghouse	is monitored by	EQUI 223: Ore Dumping Baghouse Leak Detector
TREA 122: Rotary Rail Car Dumper Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 122: Rotary Rail Car Dumper Baghouse	is monitored by	EQUI 391: Rotary Rail Car Dumper Baghouse Bag Leak Detector
TREA 123: 2100 Tonne Stone Bin Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 123: 2100 Tonne Stone Bin Baghouse	is monitored by	EQUI 392: 2100 Tonne Stone Bin Baghouse Bag Leak Detector
TREA 124: 5500 Tonne Limestone Storage Bin Bin Vent	sends to	EQUI 216: Taconite Plant DAS
TREA 124: 5500 Tonne Limestone Storage Bin Bin Vent	is monitored by	EQUI 369: 5500 Tonne Limestone Storage Bin Bin Vent Pressure Drop Monitor
TREA 125: 5500 Tonne Dolomite Storage Bin Bin Vent	sends to	EQUI 216: Taconite Plant DAS
TREA 125: 5500 Tonne Dolomite Storage Bin Bin Vent	is monitored by	EQUI 370: 5500 Tonne Dolomite Storage Bin Bin Vent Pressure Drop Monitor
TREA 126: Train Unloading Conveyor Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 126: Train Unloading Conveyor Baghouse	is monitored by	EQUI 393: Train Unloading Conveyor Baghouse Bag Leak Detector
TREA 127: Overland Conveyor Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 127: Overland Conveyor Baghouse	is monitored by	EQUI 394: Overland Conveyor Baghouse Bag Leak Detector
TREA 128: Limestone and Dolomite Grinding Mill Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 128: Limestone and Dolomite Grinding Mill	is monitored by	EQUI 395: Limestone and

SI ID: Description	Relationship type	Related SI ID: Description
Baghouse		Dolomite Grinding Mill Baghouse Bag Leak Detector
TREA 129: Fine Ore Mill Bay Tunnel1B Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 129: Fine Ore Mill Bay Tunnel1B Baghouse	is monitored by	EQUI 305: Fine Ore Mill Bay Tunnel 1B Baghouse Leak Detector
TREA 130: Fine Ore Mill Bay Tunnel 2A Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 130: Fine Ore Mill Bay Tunnel 2A Baghouse	is monitored by	EQUI 309: Fine Ore Mill Bay Tunnel 2A Baghouse Leak Detector
TREA 131: Fine Ore Mill Bay Tunnel 2B Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 131: Fine Ore Mill Bay Tunnel 2B Baghouse	is monitored by	EQUI 311: Fine Ore Mill Bay Tunnel 2B Baghouse Leak Detector
TREA 132: Fine Ore Mill Bay Tunnel 3A Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 132: Fine Ore Mill Bay Tunnel 3A Baghouse	is monitored by	EQUI 312: Fine Ore Mill Bay Tunnel 3A Baghouse Leak Detector
TREA 133: Fine Ore Mill Bay Tunnel 3B Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 133: Fine Ore Mill Bay Tunnel 3B Baghouse	is monitored by	EQUI 313: Fine Ore Mill Bay Tunnel 3B Baghouse Leak Detector
TREA 134: Coarse Ore Mill Bay Tunnel 2 Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 134: Coarse Ore Mill Bay Tunnel 2 Baghouse	is monitored by	EQUI 314: Coarse Ore Mill Bay Tunnel 2 Baghouse Leak Detector
TREA 135: Coarse Ore Mill Bay Tunnel 3 Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 135: Coarse Ore Mill Bay Tunnel 3 Baghouse	is monitored by	EQUI 315: Coarse Ore Mill Bay Tunnel 3 Baghouse Leak Detector
TREA 136: Limestone Bin Bin Vent	sends to	EQUI 216: Taconite Plant DAS
TREA 136: Limestone Bin Bin Vent	is monitored by	EQUI 355: Limestone Bin Bin Vent Pressure Drop Monitor
TREA 137: Organic Binder and Sodium Carbonate Bins Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 137: Organic Binder and Sodium Carbonate Bins Baghouse	is monitored by	EQUI 388: Organic Binder and Sodium Carbonate Bins Baghouse Bag Leak Detector
TREA 138: Bentonite Receiving Bin 1 Bin Vent	sends to	EQUI 216: Taconite Plant DAS
TREA 138: Bentonite Receiving Bin 1 Bin Vent	is monitored by	EQUI 353: Bentonite Receiving Bin 1 Bin Vent Pressure Drop Monitor
TREA 139: Mixing Conveyor Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 139: Mixing Conveyor Baghouse	is monitored by	EQUI 385: Mixing Conveyor Baghouse Bag Leak Detector
TREA 140: Product Junction House 2	sends to	EQUI 216: Taconite Plant
Mill Bay Tunnel 2 Baghouse	by	Coarse Ore Mill Bay Tunnel 2 Baghouse Leak Detector

SI ID: Description	Relationship type	Related SI ID: Description
Baghouse		DAS
TREA 140: Product Junction House 2 Baghouse	is monitored by	EQUI 318: Product Junction House 2 Baghouse Leak Detector
TREA 141: Product Junction House 3 Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 141: Product Junction House 3 Baghouse	is monitored by	EQUI 319: Product Junction House 3 Baghouse Leak Detector
TREA 142: Bentonite Receiving Bin 3 Bin Vent	sends to	EQUI 216: Taconite Plant DAS
TREA 142: Bentonite Receiving Bin 3 Bin Vent	is monitored by	EQUI 362: Bentonite Receiving Bin 3 Bin Vent Pressure Drop Monitor
TREA 143: Dolomite Bin Bin Vent	sends to	EQUI 216: Taconite Plant DAS
TREA 143: Dolomite Bin Bin Vent	is monitored by	EQUI 358: Dolomite Bin Bin Vent Pressure Drop Monitor
TREA 144: Bentonite Bin Bin Vent	sends to	EQUI 216: Taconite Plant DAS
TREA 144: Bentonite Bin Bin Vent	is monitored by	EQUI 359: Bentonite Bin Bin Vent Pressure Drop Monitor
TREA 145: Storage Bin 1 Bin Vent	sends to	EQUI 216: Taconite Plant DAS
TREA 145: Storage Bin 1 Bin Vent	is monitored by	EQUI 360: Storage Bin 1 Bin Vent Pressure Drop Monitor
TREA 146: Residual Silo Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 146: Residual Silo Baghouse	is monitored by	EQUI 357: Residual Silo Baghouse Pressure Drop Monitor
TREA 147: Storage Bin 2 Bin Vent	sends to	EQUI 216: Taconite Plant DAS
TREA 147: Storage Bin 2 Bin Vent	is monitored by	EQUI 361: Storage Bin 2 Bin Vent Pressure Drop Monitor
TREA 148: Pellet Bunker Tripper Conveyor Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 148: Pellet Bunker Tripper Conveyor Baghouse	is monitored by	EQUI 327: Pellet Bunker Tripper Conveyor Baghouse Leak Detector
TREA 149: Pellet Bunker Product Conveyor Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 149: Pellet Bunker Product Conveyor Baghouse	is monitored by	EQUI 328: Pellet Bunker Product Conveyor Baghouse Leak Detector
TREA 150: Primary Crusher Building Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 150: Primary Crusher Building Baghouse	is monitored by	EQUI 320: Primary Crusher Building Baghouse Leak Detector
TREA 151: Pneumatic Transport Vent 1 Bin Vent	sends to	EQUI 216: Taconite Plant DAS
TREA 151: Pneumatic Transport Vent 1 Bin Vent	is monitored by	EQUI 363: Pneumatic Transport Vent

SI ID: Description	Relationship type	Related SI ID: Description
		1 Bin Vent Pressure Drop Monitor
TREA 152: Pneumatic Transport Vent 2 Bin Vent	sends to	EQUI 216: Taconite Plant DAS
TREA 152: Pneumatic Transport Vent 2 Bin Vent	is monitored by	EQUI 364: Pneumatic Transport Vent 2 Bin Vent Pressure Drop Monitor
TREA 153: Bentonite Unloading Baghouse 2	sends to	EQUI 216: Taconite Plant DAS
TREA 153: Bentonite Unloading Baghouse 2	is monitored by	EQUI 389: Bentonite Unloading Baghouse 2 Bag Leak Detector
TREA 154: 55 Tonne Day Bin Bin Vent	sends to	EQUI 216: Taconite Plant DAS
TREA 154: 55 Tonne Day Bin Bin Vent	is monitored by	EQUI 374: 55 Tonne Day Bin Bin Vent Pressure Drop Monitor
TREA 158: Pneumatic Transport Vent 3 Bin Vent	sends to	EQUI 216: Taconite Plant DAS
TREA 158: Pneumatic Transport Vent 3 Bin Vent	is monitored by	EQUI 375: Pneumatic Transport Vent 3 Bin Vent Pressure Drop Monitor
TREA 159: Indurating Furnace Waste Gas Activated Carbon Injection 1	sends to	EQUI 216: Taconite Plant DAS
TREA 159: Indurating Furnace Waste Gas Activated Carbon Injection 1	is monitored by	EQUI 396: Indurating Furnace Waste Gas ACI 1 Injection Rate Monitor
TREA 159: Indurating Furnace Waste Gas Activated Carbon Injection 1	is monitored by	EQUI 397: Indurating Furnace Waste Gas ACI 1 Carrier Gas Flow Rate Monitor
TREA 160: Small Limestone and Dolomite Stockpile Loadout Dust Suppression		
TREA 161: Small Limestone and Dolomite Stockpile Loading Dust Suppression		
TREA 162: Small Limestone and Dolomite Stockpile Wind Erosion Dust Suppression		
TREA 163: Large Limestone and Dolomite Stockpile Loadout Dust Suppression		
TREA 164: Large Limestone and Dolomite Stockpile Loading Dust Suppression		
TREA 165: Large Limestone and Dolomite Stockpile Wind Erosion Dust Suppression		
TREA 168: Product Stockpile Loadout Dust Suppression		
TREA 170: Pellet Loadout Baghouse	sends to	EQUI 216: Taconite Plant DAS
TREA 170: Pellet Loadout Baghouse	is monitored by	EQUI 377: Pellet Loadout Baghouse Leak Detector
TREA 171: In-pit Haul Road Dust Suppression		
TREA 173: Indurating Furnace Waste Gas Multiclone 2	sends to	EQUI 216: Taconite Plant DAS
TREA 173: Indurating Furnace Waste Gas Multiclone 2	is monitored by	EQUI 405: Indurating Furnace Waste

SI ID: Description	Relationship type	Related SI ID: Description
		Gas Multiclone 2 Pressure Drop Monitor
TREA 174: Indurating Furnace Waste Gas Gas Suspension Absorber 2	sends to	EQUI 216: Taconite Plant DAS
TREA 174: Indurating Furnace Waste Gas Gas Suspension Absorber 2	is monitored by	EQUI 402: Indurating Furnace Waste Gas GSA 2 Injection Rate Monitor
TREA 174: Indurating Furnace Waste Gas Gas Suspension Absorber 2	is monitored by	EQUI 404: Indurating Furnace Waste Gas GSA 2 Pressure Drop Monitor
TREA 174: Indurating Furnace Waste Gas Gas Suspension Absorber 2	is monitored by	EQUI 412: Indurating Furnace Waste Gas GSA 1 Carrier Gas Flow Rate Monitor
TREA 175: Indurating Furnace Waste Gas Activated Carbon Injection 2	sends to	EQUI 216: Taconite Plant DAS
TREA 175: Indurating Furnace Waste Gas Activated Carbon Injection 2	is monitored by	EQUI 398: Indurating Furnace Waste Gas ACI 2 Injection Rate Monitor
TREA 175: Indurating Furnace Waste Gas Activated Carbon Injection 2	is monitored by	EQUI 399: Indurating Furnace Waste Gas ACI 2 Carrier Gas Flow Rate Monitor
TREA 176: Indurating Furnace Waste Gas Baghouse 2	sends to	EQUI 216: Taconite Plant DAS
TREA 176: Indurating Furnace Waste Gas Baghouse 2	is monitored by	EQUI 406: Indurating Furnace Waste Gas Baghouse 2 Leak Detector

5. Limits and other requirements

Requirement number	Requirement and citation
TFAC 1	**Mesabi Metallics Co LLC**
5.1.1	The Permittee is authorized to construct the equipment identified in Appendix E of this permit. The construction authorization expires if construction does not commence within 18 months after Stage 1 Issuance of Air Emissions Permit No. 06100067-005, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The reasonable time for construction to be completed ends on December 31, 2027 and construction authorization shall become invalid after this date. [Stage 1]. [Title I Condition: 40 CFR 52.21(r)(2) and Minn. R. 7007.3000]
5.1.2	Permit Appendices: This permit contains appendices as listed in the permit Table of Contents. The Permittee shall comply with all requirements contained in: - Appendix A: Insignificant Activities and General Applicable Requirements; - Appendix B: Modeling Parameters and Emission Rates; - Appendix C: Material Concentration Sampling Confidence Levels; - Appendix D: Visible Emissions Checklist; - Appendix E: Construction Authorization Equipment List; - Appendix F: Sulfuric Acid Mist Emissions Calculations; - Appendix G: Indurating Furnace CO2e calculations; - Appendix H: Ambient Air Boundary Map; - Appendix I: Fugitive Dust Control Plan; - Appendix J: 40 CFR pt. 60, subp. A-General Provisions; - Appendix K: 40 CFR pt. 60, subp. LL-Standards of Performance for Metallic Mineral Processing Plants; - Appendix L: 40 CFR pt. 60, subp. OOO-Standards of Performance for Nonmetallic Mineral Processing Plants; - Appendix M: 40 CFR pt. 60, subp. IIII-Standards of Performance for Stationary Compression Ignition Internal Combustion Engines; - Appendix N: 40 CFR pt. 63, subp. A-General Provisions; - Appendix O: 40 CFR pt. 63, subp. RRRRR-National Emission Standards for Hazardous Air Pollutants: Taconite Iron Ore Processing; - Appendix P: 40 CFR pt. 63, subp. RRRRR Compliance Equations; - Appendix Q: Mobile Source Emissions Calculations; and - Appendix R: Mercury Emissions Calculations. Modeling parameters in Appendix B: Modeling Parameters and Emission Rates are included for reference only as described elsewhere in this permit. [Minn. R. 7007.0800, subp. 2(A) & (B)]
5.1.3	Mercury: Mercury Emissions Reduction Plan Implementation: The Permittee must implement and comply with the mercury emissions reduction plan, as approved by the Commissioner. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and citizens under the Clean Air Act. [Minn. R. 7007.0502, subp. 8]
5.1.4	Mercury: Mercury Reduction Plan Modifications: The Permittee may request modification of the approved mercury emissions reduction plan or enforceable agreement by submitting a written request to the commissioner. The request must include: - a description of the modification; - reasons for the modification; and - if the request is to modify the mercury reduction, the information required under Minn. R. 7007.0502, subp. 5(A)(1), for the requested new reduction.

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	This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and citizens under the Clean Air Act. [Minn. R. 7007.0502, subp. 9(A)]
5.1.5	Mercury: Mercury Reduction Plan Modifications: The Permittee may not implement any proposed plan modifications until the commissioner approves the modification, issues an amended permit, or revises an enforceable agreement, as applicable. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and citizens under the Clean Air Act. [Minn. R. 7007.0502, subp. 9(B)]
5.1.6	If the results of the Haul Road Control Efficiency Study Report show that the current control practices do not support the modeled control efficiency assumptions, the Permittee must submit a Computer Dispersion Modeling Protocol with the Haul Road Control Efficiency Study Report in accordance with the current version of the MPCA Air Dispersion Modeling Practices Manual using the applicable MPCA modeling form(s). This modeling protocol can consider an analysis such as an equivalent or better dispersion analysis (EBD) or any modeling analysis consistent with the current version of the MPCA Air Dispersion Modeling Practices Manual. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]
5.1.7	At all times, including periods of startup, shutdown, and malfunction (SSM), the Permittee shall, to the extent practicable, maintain and operate any emissions unit including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.1.8	General Public Preclusion Plan - Boundary Map Within 60 days after the Stage 2 Permit Issuance date, the Permittee must use fencing, control access points, conduct security patrols, place restriction signage, and remote monitoring as specified in Appendix H to maintain control over the effective fence line. Appendix H to this permit is a map that depicts the boundary at which the access of the general public can be controlled and compliance with the National Ambient Air Quality Standards (NAAQS) can be demonstrated. This boundary has been defined as the "effective fence line." Appendix H identifies the forms of control the Permittee will use to restrict access to the general public along portions of the effective fence line. The general public does not include employees or other categories of people who have been directly authorized by the property owner to enter or remain on the property for a limited period of time and for a specific purpose. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subp. 4(D), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]
5.1.9	General Public Preclusion Plan This Plan must, at a minimum, contain the following information: - A map of the facility that clearly displays the ambient air boundary. The map must indicate how access is precluded for each section of the boundary and must identify all access points (including roadways, power lines, rail spurs, etc.); - Locations where fencing will be implemented; - Locations where security patrols will be implemented and the security patrol frequency; - Restriction signage spacing (restriction signage may include notices such as "No Trespassing," "Private Property," "Do Not Enter," or "Restricted Area"); - Location of remote monitoring devices; - Operation and maintenance requirements of remote monitoring software and devices; - Contingency plans for downtime for remote monitoring software and devices; and - A response plan for when breaches occur. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subp. 4(D), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]
5.1.10	Recordkeeping for Breaches of the Ambient Air Boundary

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	Within three calendar days of each observed breach, the Permittee must document each instance that the ambient air boundary was breached by a member of the general public, including documenting the type, location, and duration of each breach. The Permittee must identify and, within a reasonable amount of time, implement measures to prevent future breaches, if necessary. A breach to the ambient boundary occurs when a member of the general public accesses property identified by the Permittee as non-ambient air. The observation of a breach may be direct or indirect. A direct observation includes witnessing a member of the general public on property identified as non-ambient air. Indirect observations rely on evidence of a breach, such as a cut fence, worn paths, motorized vehicle tracks, or other signs of disturbance by a member of the general public on property identified as non-ambient air. The Permittee must report each breach, including all steps taken or changes made to the General Public Preclusion Plan to prevent additional breaches, in the semiannual Deviations Report required by this permit. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subp. 4(D), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]
5.1.11	General Public Preclusion Plan - Fencing: The Permittee must install and maintain fencing along ambient air boundary effective fence line as depicted in Appendix H. The Permittee must inspect the fence line once per quarter. The Permittee must maintain records of inspection and required maintenance of fence line. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subp. 4(D), Minn. R. 7007.0800, subp. 5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]
5.1.12	General Public Preclusion Plan - Control of Access: The Permittee must control access at any road, trail equal to or wider than 50 inches, and all abandoned railroad grades. The Permittee must secure these access points with a locked and/or monitored gate or other physical barrier precluding access by the general public. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subp. 4(D), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]
5.1.13	General Public Preclusion Plan - Security Patrols: The Permittee must develop, operate, and maintain a security patrol plan as part of the Plan. Patrol routes must be followed as defined in the Plan. For portions of the effective fence line where patrols are identified, the Permittee must patrol those portions at a minimum of once per operating day. The Permittee must maintain records of patrol routes and frequency of patrols. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subp. 4(D), Minn. R. 7007.0800, subp. 5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]
5.1.14	General Public Preclusion Plan - Remote Monitoring: The Permittee must operate and maintain remote monitoring equipment to maintain the effective fence line as depicted in Appendix H. The Permittee must monitor at a minimum of once per day. Remote monitoring devices include but are not limited to fixed cameras and drone mounted cameras. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subp. 4(D), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]
5.1.15	Contractors: Prior to any contractor activities being conducted on site, the Permittee shall determine whether the contractor activities are part of the stationary source as defined by Minn. R. 7005.0100, subpart 42c. If the contractor activities are part of the stationary source, the Permittee shall evaluate the activities to determine whether a permit amendment is needed. If a permit amendment is needed, the Permittee shall apply for and obtain the appropriate permit amendment or permit prior to making the change. If the Permittee determines a permit amendment is not needed, the Permittee shall retain records of the calculations and other information used to determine a permit amendment is not

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	needed. [Minn. R. 7007.0800, subps. 4-5]
5.1.16	Contractors Continued: If the contractor activities are not part of the stationary source, the Permittee shall retain the following records on site for each contractor: 1. The contractor company name; 2. The information used to determine the contractor activities are not part of the stationary source; 3. The date the contractor starts operating on site; 4. The date the contractor stops operating on site; 5. The contractor's MPCA air emissions permit number, if a permit is needed for the activities; 6. A brief description of the activities undertaken by the contractor, including types and amounts of materials handled and hours of operation; 7. A list of the equipment operated on site by the contractor; and 8. Estimated emissions for the contractor activities. [Minn. R. 7007.0800, subps. 4-5]
5.1.17	The Permittee must comply with Minn. Stat. 116.385. The Permittee may not use trichloroethylene at its permitted facility including in any manufacturing, processing, or cleaning processes, except as described in Minn. Stat. 116.385, subd. 2(b) and 4. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and citizens under the Clean Air Act. [Minn. R. 7007.0100, subp. 7(X), Minn. Stat. 116.385]
5.1.18	PERMIT SHIELD: Subject to the limitations in Minn. R. 7007.1800, compliance with the conditions of this permit shall be deemed compliance with the specific provision of the applicable requirement identified in the permit as the basis of each condition. Subject to the limitations of Minn. R. 7007.1800 and 7017.0100, subp. 2, notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements. This permit shall not alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance. [Minn. R. 7007.1800(A)(2)]
5.1.19	Comply with Fugitive Emission Control Plan: The Permittee shall follow the actions and recordkeeping specified in the fugitive dust control plan in Appendix I of this permit. If the Commissioner determines the Permittee is out of compliance with Minn. R. 7011.0150 or the fugitive control plan, then the Permittee may be required to amend the control plan and/or to install and operate particulate matter ambient monitors as requested by the Commissioner. [Minn. R. 7007.0800, subp. 2(A), Minn. R. 7009.0020, Minn. R. 7011.0150, Minn. Stat. 116.07, subd. 4a(a)]
5.1.20	The Permittee must comply with National Primary and Secondary Ambient Air Quality Standards, 40 CFR pt. 50, and the Minnesota Ambient Air Quality Standards, Minn. R. 7009.0010 to 7009.0090. Compliance must be demonstrated upon written request by the MPCA. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]
5.1.21	Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted. [Minn. R. 7011.0020]
5.1.22	The Permittee must at all times properly operate and maintain the facilities and systems of treatment and control and the appurtenances related to them that are installed or used by the Permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. [Minn. R. 7007.0800, subp. 16(J)]
5.1.23	Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. At a minimum, the O & M plan shall identify all air pollution control equipment and control practices and shall include a preventative maintenance program for the equipment and practices, a description of (the minimum but not necessarily the only) corrective

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	actions to be taken to restore the equipment and practices to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment and practices, and the records kept to demonstrate plan implementation. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 16(J)]
5.1.24	Operation Changes: In any shutdown, breakdown, or deviation the Permittee must immediately or as soon as possible considering plant and personnel safety take all practical steps to modify operations to reduce the emission of any regulated air pollutant. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment are permitted to operate. [Minn. R. 7019.1000, subp. 4]
5.1.25	Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150. [Minn. R. 7011.0150]
5.1.26	Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and citizens under the Clean Air Act. [Minn. R. 7030.0010-7030.0080]
5.1.27	Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A). [Minn. R. 7007.0800, subp. 9(A)]
5.1.28	The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16. [Minn. R. 7007.0800, subp. 16]
5.1.29	Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in this permit. [Minn. R. ch. 7017]
5.1.30	Performance Test Notifications and Submittals: Performance Test Notification and Plan: due 30 days before each Performance Test Performance Test Pre-test Meeting: due seven days before each Performance Test Performance Test Report: due 45 days after each Performance Test The Notification, Test Plan, and Test Report must be submitted in a format specified by the commissioner. [Minn. R. 7017.2017, Minn. R. 7017.2030, subps. 1-4, Minn. R. 7017.2035, subps. 1-2]
5.1.31	Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as stated in the MPCA's Notice of Compliance letter granting preliminary approval. Preliminary approval is based on formal review of a subsequent performance test on the same unit as specified by Minn. R. 7017.2025, subp. 3. The limit is final upon issuance of a permit amendment incorporating the change. [Minn. R. 7017.2025, subp. 3]
5.1.32	Monitoring Equipment Calibration - The Permittee shall either: 1. Calibrate or replace required monitoring equipment every 12 months; or 2. Calibrate at the frequency stated in the manufacturer's specifications. For each monitor, the Permittee shall maintain a record of all calibrations, including the date conducted, and any corrective action that resulted. The Permittee shall include the calibration frequencies, procedures, and manufacturer's specifications (if applicable) in the Operations and Maintenance Plan. Any requirements applying to continuous emission monitors are listed separately in this permit. [Minn. R. 7007.0800, subp. 4(D)]
5.1.33	Operation of Monitoring Equipment: Unless noted elsewhere in this permit, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system. [Minn. R. 7007.0800, subp. 4(D)]

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5.1.34	Recordkeeping: Retain all records at the stationary source, unless otherwise specified within this permit, for five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A). [Minn. R. 7007.0800, subp. 5(C)]
5.1.35	Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007.1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350, subp. 2), including records of the emissions resulting from those changes. [Minn. R. 7007.0800, subp. 5(B)]
5.1.36	If the Permittee determines that no permit amendment or notification is required prior to making a change, the Permittee must retain records of all calculations required under Minn. R. 7007.1200. For expiring permits, these records shall be kept for a period of five years from the date the change was made or until permit reissuance, whichever is longer. The records shall be kept at the stationary source for the current calendar year of operation and may be kept at the stationary source or office of the stationary source for all other years. The records may be maintained in either electronic or paper format. [Minn. R. 7007.1200, subp. 4]
5.1.37	These following 40 CFR 52.21(r)(6) requirements apply if a reasonable possibility (RP) as defined in 40 CFR 52.21(r)(6)(vi) exists that a proposed project, analyzed using the actual-to-projected-actual (ATPA) test (either by itself or as part of the hybrid test at 40 CFR 52.21(a)(2)(iv)(f)) and found to not be part of a major modification, may result in a significant emissions increase (SEI). If the ATPA test is not used for the project, or if there is no RP that the proposed project could result in a SEI, these requirements do not apply to that project. The Permittee is only subject to the Preconstruction Documentation requirement for a project where a RP occurs only within the meaning of 40 CFR 52.21(r)(6)(vi)(b). Even though a particular modification is not subject to New Source Review (NSR), or where there isn't a RP that a proposed project could result in a SEI, a permit amendment, recordkeeping, or notification may still be required by Minn. R. 7007.1150 - 7007.1500. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(r)(6) and Minn. R. 7007.3000]
5.1.38	Preconstruction Documentation -- Before beginning actual construction on a project, the Permittee shall document the following: 1. Project description 2. Identification of any emission unit whose emissions of an NSR pollutant could be affected 3. Pre-change potential emissions of any affected existing emission unit, and the projected post-change potential emissions of any affected existing or new emission unit. 4. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded due to increases not associated with the modification and that the emission unit could have accommodated during the baseline period, an explanation of why the amounts were excluded, and any creditable contemporaneous increases and decreases that were considered in the determination. The Permittee shall maintain records of this documentation. [Minn. R. 7007.0800, subps. 4-5, Minn. R. 7007.1200, subp. 4, Title I Condition: 40 CFR 52.21(r)(6) and Minn. R. 7007.3000]
5.1.39	Post-change Emissions - The Permittee shall monitor the actual emissions of any regulated NSR pollutant that could increase as a result of the project and that were analyzed using the ATPA test, and the potential emissions of any regulated NSR pollutant that could increase as a result of the project and that were analyzed using potential emissions in the hybrid test. The Permittee shall calculate and maintain a record of the sum of the actual and potential (if the hybrid test was used in the analysis) emissions of the regulated pollutant, in tons per year on a calendar year basis, for a period of five years following resumption of regular operations after the change, or for a period of 10 years following

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	resumption of regular operations after the change if the project increases the design capacity of or potential to emit of any unit associated with the project. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(r)(6) and Minn. R. 7007.3000]
5.1.40	The Permittee must submit a report to the Agency if the annual summed (actual, plus potential if used in hybrid test) emissions differ from the preconstruction projection and exceed the baseline actual emissions by a significant amount as listed at 40 CFR 52.21(b)(23). Such report shall be submitted to the Agency within 60 days after the end of the year in which the exceedances occur. The report shall contain: a. The name and ID number of the Facility, and the name and telephone number of the Facility contact person; b. The annual emissions identified in the Post-change Emissions requirement (above); and c. Any other information, such as an explanation as to why the summed emissions differ from the preconstruction projection. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(r)(6) and Minn. R. 7007.3000]
5.1.41	Shutdown Notifications: Notify the commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the Permittee does not have advance knowledge of the shutdown, the Permittee must notify the commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in items A, B, and C of Minn. R. 7019.1000, subp. 3. At the time of notification, the owner or operator must inform the commissioner of the cause of the shutdown and the estimated duration. The owner or operator must notify the commissioner when the shutdown is over. [Minn. R. 7019.1000, subp. 3]
5.1.42	Breakdown Notifications: Notify the commissioner within 24 hours of a breakdown of more than one hour of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in items A, B, and C of Minn. R. 7019.1000, subp. 2. At the time of notification or as soon as possible thereafter, the Permittee must inform the commissioner of the cause of the breakdown and the estimated duration. The Permittee must notify the commissioner when the breakdown is over. [Minn. R. 7019.1000, subp. 2]
5.1.43	Notification of Deviations Endangering Human Health or the Environment: Immediately after discovery of the deviation or immediately after when the deviation reasonably should have been discovered, notify the commissioner either orally or by e-mail, or telephone the state duty officer at 800-422-0798 or 651-649-5451, of any deviation from permit conditions that could endanger human health or the environment. [Minn. R. 7019.1000, subp. 1]
5.1.44	Notification of Deviations Endangering Human Health or the Environment Report: Within two working days of discovery, notify the commissioner in writing of any deviation from permit conditions that could endanger human health or the environment. Include the following information in this written description: 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation. [Minn. R. 7019.1000, subp. 1]
5.1.45	Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates

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	vary, depending on the type of amendment needed. Upon adoption of a new or amended federal applicable requirement, and if there are three or more years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150 - 7007.1500]
5.1.46	Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H). Performance testing deadlines from the General Provisions of 40 CFR pt. 60 and pt. 63 are examples of deadlines for which the MPCA does not have authority to grant extensions and therefore do not meet the requirements of Minn. R. 7007.1400, subp. 1(H). [Minn. R. 7007.1400, subp. 1(H)]
5.1.47	Within 15 days of a request from the Commissioner, the Permittee must provide a complete summary of all performance tests required at the facility including the subject item, pollutant, most recent test date (if applicable), and the date of the next test in an approved format. [Minn. R. 7007.0800, subp. 16(L)]
5.1.48	Emission Inventory Report: due on or before April 1 of each calendar year following permit issuance. Submit in a format specified by the Commissioner. [Minn. R. 7019.3000-7019.3100]
5.1.49	Emission Fees: due 30 days after receipt of an MPCA bill. [Minn. R. 7002.0005-7002.0085]
5.1.50	The Permittee currently uses ozone-depleting substances as defined in 40 CFR pt. 82. Sections 601-618 of the 1990 Clean Air Act Amendments and 40 CFR pt. 82 may apply to the facility. Read Sections 601-618 and 40 CFR pt. 82 to determine all the requirements that apply to the facility. [40 CFR pt. 82]
COMG 2	**Finished Pellet Handling**
5.2.1	The Permittee must limit Filterable Particulate Matter <= 0.005 grains per dry standard cubic foot 3-hour average measured as a flow-weighted mean concentration for all finished pellet handling emission units in this group. The Permittee must determine the flow-weighted mean concentration of Filterable Particulate Matter emissions following the procedures in 40 CFR 63.9621(b). [40 CFR 63.9590(a), 40 CFR 63.9621(b), 40 CFR 63.9634(b)(1), 40 CFR pt. 63, subp. RRRRR(Table 1)(Item 5)New, Minn. R. 7011.8030]
5.2.2	Pellet Concentration: Lead <= 2.0 milligrams per kilogram 12-month rolling average on a dry basis of pellets handled by the sources listed in this group. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.2.3	Pellet Concentration: Fluorides <= 50 milligrams per kilogram 12-month rolling average on a dry basis of pellets handled by the sources listed in this group. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.2.4	Lead: Sampling Methodology: For the first 12 consecutive months after the Initial Startup Date of pellet production, the Permittee must sample and analyze the lead concentration of the pellets on a dry basis using EPA Method 6010B on a weekly basis. If after 12 consecutive months, each sample is less than the concentration limit or if the 95% UCL of all samples taken in the previous 12-month period is less than the concentration limit, the sampling frequency may be reduced to monthly. If thereafter, the 95% UCL of all samples taken in the previous 12-month period is greater than the limit, the Permittee must sample and analyze weekly until the 95% UCL of all samples taken in a continuous 12-month period is less than the limit. The Permittee may then reduce the sampling frequency to monthly. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.2.5	Lead: 95% Upper Confidence Level (UCL): The Permittee must use the following method for calculating the pellet lead concentration 95% UCL: - For samples for which the lead concentration is less than the detection limit, the Permittee must

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	assume a concentration of lead equal to the detection limit. - The Permittee must calculate the 95% UCL using the EPA ProUCL (Version 5.2 or higher) software or other electronic spreadsheet program, as illustrated in Appendix C. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.2.6	Lead: Recordkeeping: By the 28th of each month, the Permittee must calculate and record the pellet lead concentration for the samples taken in the previous calendar month and must calculate the 12-month rolling average pellet lead concentration for the previous 12-month period. [Stage 1]. [Minn. R. 7007.0800, subp. 5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.2.7	Fluorides: Sampling Methodology: For the first 12 consecutive months after the Initial Startup Date of pellet production, the Permittee must sample and analyze the fluorides concentration of the pellets on a dry basis using EPA Method 9056 on a weekly basis. If after 12 consecutive months, each sample is less than the concentration limit or if the 95% UCL of all samples taken in the previous 12-month period is less than the concentration limit, the sampling frequency may be reduced to monthly. If thereafter, the 95% UCL of all samples taken in the previous 12-month period is greater than the limit, the Permittee must sample and analyze weekly until the 95% UCL of all samples taken in a continuous 12-month period is less than the limit. The Permittee may then reduce the sampling frequency to monthly. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.2.8	Fluorides: 95% Upper Confidence Level (UCL): The Permittee must use the following method for calculating the pellet fluorides concentration 95% UCL: - For samples for which the fluorides concentration is less than the detection limit, the Permittee shall assume a concentration of fluorides equal to the detection limit. - The Permittee must calculate the 95% UCL using the EPA ProUCL (Version 5.2 or higher) software or other electronic spreadsheet program, as illustrated in Appendix C. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.2.9	Fluorides: Recordkeeping: By the 28th of each month, the Permittee must calculate and record the pellet fluorides concentration for the samples taken in the previous calendar month and must calculate the 12-month rolling average pellet fluorides concentration for the previous 12-month period. [Stage 1]. [Minn. R. 7007.0800, subp. 5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.2.10	Mercury: Pellet Sampling Methodology. The Permittee must sample and analyze the mercury concentration of the pellets on a dry basis using EPA Method 7473 once per calendar month for each type of pellet (high-flux or low-flux) produced during that calendar month. During any mercury performance tests required for EQUI 257 or EQUI 258, the Permittee must sample and analyze the mercury concentration of the produced pellets. The sample taken during the performance test may count as the monthly mercury concentration sample. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and citizens under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D)]
5.2.11	Mercury: Pellet Sampling Recordkeeping. By the 28th of each month, the Permittee must calculate and record the pellet mercury concentration for the samples taken in the previous calendar month for each type of pellet (high-flux or low-flux) produced during that calendar month. If more than one sample is taken during the previous calendar month for a type of pellet, the Permittee must calculate and record the average pellet mercury concentration of the samples taken in that calendar month for that type of pellet. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and citizens under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 5(A)]

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5.2.12	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9581; 40 CFR 63.9582(a)-(c) & (e); 40 CFR 63.9583(c) & (e); 40 CFR 63.9590(a); 40 CFR 63.9600(a); 40 CFR 63.9610(a); 40 CFR 63.9620(c) & (e)-(g); 40 CFR 63.9621(a) & (b); 40 CFR 63.9623(a)(3) & (f); 40 CFR 63.9630(c); 40 CFR 63.9633; 40 CFR 63.9634(a) & (b); 40 CFR 63.9637; 40 CFR 63.9640(a), (d), & (e); 40 CFR 63.9641(a)-(h); 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; 40 CFR 63.9650; 40 CFR 63.9652; 40 CFR pt. 63, subp. RRRRR, Table 1, Item 5 (new); and 40 CFR pt. 63, subp. RRRRR, Table 4, as specified elsewhere in this permit. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
5.2.13	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. A as follows: 40 CFR 63.1(a); 40 CFR 63.1(b)(1) & (3); 40 CFR 63.1(c)(1) & (2); 40 CFR 63.2; 40 CFR 63.3; 40 CFR 63.4(a)-(c); 40 CFR 63.5(a), (b), & (d)-(f); 40 CFR 63.6(a)(1); 40 CFR 63.6(b)(1)-(5); 40 CFR 63.6(c)(1) & (2); 40 CFR 63.6(e)(1)(iii); 40 CFR 63.6(f)(2) & (3); 40 CFR 63.6(g); 40 CFR 63.6(i)(1)-(6), (8), (9), & (11); 40 CFR 63.6(j); 40 CFR 63.7(a)(3) & (4); 40 CFR 63.7(b)-(d) & (f)-(h); 40 CFR 63.7(e)(2)-(4); 40 CFR 63.9(b)(1), (2), (4), & (5); 40 CFR 63.9(c)-(e) & (h)-(j);

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	40 CFR 63.10(a)(5)-(7); 40 CFR 63.10(b)(1); 40 CFR 63.10(b)(2)(iii), (vi)-(xii), & (xiv); 40 CFR 63.10(b)(3); 40 CFR 63.10(c)(1)-(6) & (10)-(14); 40 CFR 63.10(d)(1), (2), & (4); 40 CFR 63.10(e)(3); 40 CFR 63.10(f); 40 CFR 63.12; 40 CFR 63.13; 40 CFR 63.14; and 40 CFR 63.15(a) & (b). A copy of 40 CFR pt. 63, subp. A is included in Appendix N. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR 63.9650, 40 CFR pt. 63, subp. A, 40 CFR pt. 63, subp. RRRR(Table 2), Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(B), Minn. R. 7011.8030, Minn. R. 7017.1010 & 7017.2015, subp. 3, Minn. R. 7019.0100]
COMG 21	**Indurating Furnace**
5.3.1	The Permittee must limit High-Flux Pellet Production <= 6.50 million metric tons per year 12-month rolling sum to be calculated by the 15th day of each month for the previous 12-month period as described later in this permit. [Stage 1]. [Minn. R. 7005.0100, subp. 35a, Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a), Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.3.2	The Permittee must limit Low-Flux Pellet Production <= 7.00 million metric tons per year 12-month rolling sum to be calculated by the 15th day of each month for the previous 12-month period as described later in this permit. [Stage 1]. [Minn. R. 7005.0100, subp. 35a, Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a), Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.3.3	Filterable Particulate Matter <= 45.0 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.3.4	The Permittee must limit Filterable Particulate Matter <= 0.006 grains per dry standard cubic foot 3-hour average measured as a flow-weighted mean concentration for all stacks from the indurating furnace. The Permittee must determine the flow-weighted mean concentration of filterable articulate matter emissions following the procedures in 40 CFR 63.9621(c). [40 CFR 63.9590(a), 40 CFR 63.9621(c), 40 CFR 63.9634(c)(1), 40 CFR pt. 63, subp. RRRR(Table 1)(Item 2)(new), Minn. R. 7011.8030]
5.3.5	Particulate Matter <= 0.30 grains per dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. Because it has been shown that the facility does not cause a violation of ambient air quality standards, and is located outside the Mpls/St. Paul air quality control region and the city of Duluth, and is located at least 1/4 mile from any residence or public roadway, and the industrial process equipment is controlled by control equipment which has a collection efficiency of 85% by weight, this direct heating equipment is considered to be in compliance with this requirement. [Minn. R. 7011.0610, subp. 1(A)(1), Minn. R. 7011.0715, subp. 3]
5.3.6	PM < 10 micron <= 91.0 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R.

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	7007.3000]
5.3.7	PM < 2.5 micron <= 91.0 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.3.8	Carbon Monoxide <= 26.1 pounds per hour 1-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.3.9	Nitrogen Oxides <= 0.25 pounds per million Btu heat input 1-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.3.10	Nitrogen Oxides <= 135.5 pounds per hour 1-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.3.11	Sulfur Dioxide <= 85.6 pounds per hour 1-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.3.12	Volatile Organic Compounds <= 12.6 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.3.13	Lead <= 0.042 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.3.14	Fluorides <= 8.5 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.3.15	Sulfuric Acid Mist <= 0.77 pounds per hour 1-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.3.16	Carbon Dioxide Equivalent <= 678,000 tons per year 12-month rolling sum, to be calculated by the 15th day of each month for the previous 12-month period as described later in this permit. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.3.17	Mercury <= 24.11 pounds per year 12-month rolling sum to be calculated by the 15th day of each month for the previous 12-month period as measured by CEMS and as described later in this permit. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 6]
5.3.18	The Permittee must limit emissions of Mercury <= 0.000014 pounds per long ton of pellets produced by March 8, 2027. [40 CFR 63.9583(f)(1), 40 CFR 63.9590(a), 40 CFR pt. 63, subp. RRRRR(Table 2)(Item 1)(1), Minn. R. 7011.8030]
5.3.19	The Permittee must limit emissions of Hydrogen Chloride <= 0.046 pounds per long ton of pellets produced by March 8, 2027. [40 CFR 63.9583(f)(1), 40 CFR 63.9590(a), 40 CFR pt. 63, subp. RRRRR(Table 3)(Item 1), Minn. R. 7011.8030]
5.3.20	The Permittee must limit emissions of Hydrogen fluoride <= 0.012 pounds per long ton of pellets produced by March 8, 2027. [40 CFR 63.9583(f)(1), 40 CFR 63.9590(a), 40 CFR pt. 63, subp. RRRRR(Table 3)(Item 1), Minn. R. 7011.8030]
5.3.21	Opacity <= 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. [Minn. R. 7011.0610, subp. 1(A)(2)]
5.3.22	The Permittee must implement and operate according to the site-specific good combustion practices identified in the Operation and Maintenance Plan. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.3.23	The Permittee must maintain records of all applicable operator logs and applicable records to document compliance with each element of the Operation and Maintenance Plan. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.3.24	The Permittee must install and operate the ultra-low NOx burners TREA 58. [Stage 1]. [Title I Condition:

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	40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.3.25	Fuel type: Natural gas only, by design. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.3.26	The Permittee must install and operate a natural gas flow meter to measure the volume of natural gas used in the pellet furnace. Monitor and record the monthly natural gas use in the furnace. The Permittee must obtain information on a semiannual basis from the natural gas vendor for the molecular weight, molar conversion factor, and carbon content of the gas to be used in the calculation of CO2 emissions. [Stage 1]. [Minn. R. 7007.0800, subp. 5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.3.27	Production: Daily Recordkeeping. On each day of operation the Permittee must calculate, record, and maintain a record of the high-flux pellet production and low-flux pellet production. This must be based on weight scale measurements and recorded in written logs. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.3.28	Production: Monthly Recordkeeping. By the 15th of the month, the Permittee must calculate and record the following: - The total high-flux pellet production and low-flux pellet production for the previous calendar month using the daily records; and - The 12-month rolling sum of high-flux pellet production and low-flux pellet production for the previous 12-month period by summing the monthly process throughput used for the previous 12 months. [Minn. R. 7007.0800, subps. 4-5]
5.3.29	Carbon Dioxide Equivalent: Daily Recordkeeping: On each day of operation, the Permittee shall calculate, record, and maintain a record of the amount of natural gas, concentrate, limestone, soda ash, dolomite, and organic binder used in the indurating furnace. This shall be based on written logs and/or electronic monitors. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.3.30	Carbon Dioxide Equivalent: Monitoring and recordkeeping: By the 15th of each month, the Permittee shall calculate and record CO2e emissions from the pellet furnace for the previous calendar month by using the daily records from COMG 21 of the permit and Equations 1 through 4 of Appendix G and shall calculate the 12-month rolling sum CO2e emissions for the previous 12-month period. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.3.31	Mercury: Daily Greenball Feed and Pellet Production Recordkeeping. On each day of operation the Permittee must calculate, record, and maintain a record of the: - high-flux greenball feed; - low-flux greenball feed; - high-flux pellet production; and - low-flux pellet production. These must be based on weigh scale measurements and recorded in written logs. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D)]
5.3.32	Mercury: Natural Gas Usage Daily Recordkeeping. On each day of operation, the Permittee must calculate, record, and maintain a record of the total cubic feet of natural gas used. This must be based on fuel usage meter readings. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and citizens under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D)]
5.3.33	Mercury: Daily Recordkeeping. On each day of operation, the Permittee must calculate, record, and maintain a record of the EQUI 257 and EQUI 258 mercury emissions for the previous day. This must be based on CEMS data. If CEMS data is unavailable for EQUI 257 during operation, the Permittee must

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	use a mercury emission rate of 0.00478 lb/hr to calculate EQUI 257 mercury emissions. If CEMS data is unavailable for EQUI 258 during operation, the Permittee must use a mercury emission rate of 0.00191 lb/hr to calculate EQUI 258 mercury emissions. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and citizens under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D)]
5.3.34	Mercury: Greenball Sampling Methodology. The Permittee must sample and analyze the mercury concentration of the greenball on a dry basis using EPA Method 7473 once per calendar month for each type of greenball (high-flux or low-flux) produced during that calendar month. During any mercury performance tests required for EQUI 257 or EQUI 258, the Permittee must sample and analyze the mercury concentration of the greenball feed. The sample taken during the performance test may count as the monthly mercury concentration sample. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and citizens under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D)]
5.3.35	Mercury: Monthly Emissions Recordkeeping. By the 15th of the month, the Permittee must calculate and record the following: - the pounds of mercury emissions measured by the hood exhaust mercury CEMS (EQUI 407) for the previous calendar month; - the pounds of mercury emissions measured by the waste gas mercury CEMS (EQUI 408) for the previous calendar month; - the total pounds of mercury emitted by the indurating furnace for the previous calendar month, as calculated by the sum of the mercury emissions measured by the CEMS EQUI 407 and EQUI 408; and - the 12-month rolling sum mercury emissions for the previous 12-month period by summing the monthly mercury CEMS data for the previous 12 months. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and citizens under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 5(A)]
5.3.36	Mercury: Greenball Sampling Recordkeeping. By the 28th of each month, the Permittee must calculate and record the greenball mercury concentration for the samples taken in the previous calendar month for each type of greenball (high-flux or low-flux) produced during that calendar month. If more than one sample is taken during the previous calendar month for a type of greenball, the Permittee must calculate and record the average greenball mercury concentration of the samples taken in that calendar month for that type of greenball. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and citizens under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 5(A)]
5.3.37	Mercury: Monthly Emissions Recordkeeping. By the 28th of the month, the Permittee must calculate and record the following: - the total high-flux greenball feed for the previous calendar month using the daily records - the total low-flux greenball feed for the previous calendar month using the daily records; - the total high-flux pellet production for the previous calendar month using the daily records; - the total low-flux pellet production for the previous calendar month using the daily records; - the total cubic feet of natural gas used for the previous calendar month using the daily records; and - the uncontrolled mercury emissions for the previous calendar month using the equation specified in Appendix R. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency

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	(EPA) Administrator and citizens under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 5(A)]
5.3.38	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9581; 40 CFR 63.9582(a)-(c) & (e); 40 CFR 63.9583(b), & (e), & (f); 40 CFR 63.9590(a); 40 CFR 63.9600(a) & (b), & (b)(4); 40 CFR 63.9610(a) & (d); 40 CFR 63.9620(b), (k)(2), & (l); 40 CFR 63.9621(a) & (c)-(e); 40 CFR 63.9623(a)(2), (a)(5), (a)(7), (a)(8), (e), & (f); 40 CFR 63.9630(b); 40 CFR 63.9633; 40 CFR 63.9634(a) & (c); 40 CFR 63.9636(a)(4) & (b); 40 CFR 63.9637; 40 CFR 63.9640(a) & (d)-(f); 40 CFR 63.9641(a)-(i); 40 CFR 63.9642(a)-(c), (e), & (f); 40 CFR 63.9643; 40 CFR 63.9650; 40 CFR 63.9652; 40 CFR pt. 63, subp. RRRRR, Table 1, Item 2 (new); and 40 CFR pt. 63, subp. RRRRR, Table 2, Item 1(1) (individual limit); 40 CFR pt. 63, subp. RRRRR, Table 3, Item 1; and 40 CFR pt. 63, subp. RRRRR, Table 4, as specified elsewhere in this permit A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
5.3.39	In addition to the other applicable requirements from 40 CFR pt. 63, subp. RRRRR found elsewhere in this permit, if the Permittee elects to demonstrate compliance with the mercury emission limit using a mercury CEMS, the Permittee is not required by 40 CFR pt. 63, subp. RRRRR to conduct performance testing for mercury or to establish and comply with operating limits for control devices used to reduce mercury emissions, and the Permittee must: - conduct a performance evaluation of each CEMS within 180 days of installation of the monitoring system, in accordance with 40 CFR 63.9620(k)(2); - determine compliance with the applicable mercury emission limit by using a 30-day rolling average of the 1-hour arithmetic average CEMS data, including CEMS data during startup and shutdown, in accordance with 40 CFR 63.9621(e); - calculate the 30-day rolling average of 1-hour arithmetic average emission concentrations, including CEMS data during startup and shutdown, in accordance with 40 CFR 63.9623(e); - comply with the requirements in 40 CFR 63.9631(k)(1)-(5); - comply with the requirements in 40 CFR 63.9634(j)(1); - must submit the results of the performance evaluation following the procedure specified in either 40 CFR 63.9641(i)(1) or (2) within 60 days after the date of completing each CEMS performance evaluation;

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	- keep the applicable records specified in 40 CFR 63.9642(b)(1) through (5); and - keep records of the notifications required in 40 CFR 63.9642(f). [40 CFR pt. 63, subp. RRRRR, Minn. R. 7011.8030]
5.3.40	In addition to the other applicable requirements from 40 CFR pt. 63, subp. RRRRR found elsewhere in this permit, to demonstrate compliance with the hydrogen chloride and hydrogen fluoride emission limits in Table 3 of 40 CFR pt. 63, subp. RRRRR, the Permittee must: - meet the applicable hydrogen chloride and hydrogen fluoride emission limits in Table 3 of 40 CFR pt. 63, subp. RRRRR; - meet the applicable operating limits for control devices used to meet the applicable hydrogen chloride and hydrogen fluoride emission limits; - conduct initial performance tests for hydrogen chloride and hydrogen fluoride on all stacks associated with each indurating furnace no later than 180 calendar days after March 8, 2027, in accordance with 40 CFR 63.9620(l); - determine compliance with the applicable hydrogen chloride and hydrogen fluoride emission limits by following the applicable test methods and procedures in 40 CFR 63.9621(d)(1) through (9); - submit a site-specific monitoring plan in accordance with 40 CFR 63.9631(i), if applicable; - establish applicable site-specific operating limits according to the procedures in 40 CFR 63.9622(g) and (i); - demonstrate initial compliance in accordance with 40 CFR 63.9623(c)(1) and (3); - conduct subsequent performance test in accordance with 40 CFR 63.9630(b); - install, operate, and maintain a continuous parameter monitoring system and monitor the applicable operating parameters, in accordance with 40 CFR 63.9631(f) and (h); - develop and make available for inspection upon request a site-specific monitoring plan that addresses the requirements in 40 CFR 63.9632(b)(1) through (7); - must meet the requirements for each CPMS in 40 CFR 63.9632(c)(1) and (2); - must conduct a performance evaluation of each CPMS and maintain the CPMS in continuous operation in accordance with your site-specific monitoring plan; - meet the applicable requirements for continuous parameter monitoring systems in 40 CFR 63.9632(g) through (i); - demonstrate continuous compliance in accordance with the applicable requirements of 40 CFR 63.9634(i)(1) and (2), (k), and (l); - demonstrate continuous compliance with the operation and maintenance requirements by completing the applicable requirements of 40 CFR 63.9636(a)(1) through (4); - submit a notification of compliance status in accordance with 40 CFR 63.9640(e); and - keep all applicable records listed in 40 CFR 63.9642. [40 CFR pt. 63, RRRRR, Minn. R. 7011.8030]
5.3.41	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. A as follows: 40 CFR 63.1(a); 40 CFR 63.1(b)(1) & (3); 40 CFR 63.1(c)(1) & (2); 40 CFR 63.2; 40 CFR 63.3; 40 CFR 63.4(a)-(c); 40 CFR 63.5(a), (b), & (d)-(f); 40 CFR 63.6(a)(1); 40 CFR 63.6(b)(1)-(5); 40 CFR 63.6(c)(1) & (2); 40 CFR 63.6(e)(1)(iii); 40 CFR 63.6(f)(2) & (3); 40 CFR 63.6(g); 40 CFR 63.6(i)(1)-(6), (8), (9), & (11); 40 CFR 63.6(j);

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	40 CFR 63.7(a)(3) & (4); 40 CFR 63.7(b)-(d) & (f)-(h); 40 CFR 63.7(e)(2)-(4); 40 CFR 63.8(a)(1) & (2); 40 CFR 63.8(b)(1)-(3); 40 CFR 63.8(c)(1)(ii), (c)(2), & (c)(3); 40 CFR 63.8(c)(5)-(8); 40 CFR 63.8(d)(1) & (2); 40 CFR 63.8(e) & (f); 40 CFR 63.8(g)(1)-(4); 40 CFR 63.9(b)(1), (2), (4), & (5); 40 CFR 63.9(c)-(e) & (g)-(j); 40 CFR 63.10(a)(5)-(7); 40 CFR 63.10(b)(1); 40 CFR 63.10(b)(2)(iii), (vi)-(xii), & (xiv); 40 CFR 63.10(b)(3); 40 CFR 63.10(c)(1)-(6) & (10)-(14); 40 CFR 63.10(d)(1), (2), & (4); 40 CFR 63.10(e); 40 CFR 63.10(f); 40 CFR 63.12; 40 CFR 63.13; 40 CFR 63.14; and 40 CFR 63.15(a) & (b). A copy of 40 CFR pt. 63, subp. A is included in Appendix N. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR 63.9650, 40 CFR pt. 63, subp. A, 40 CFR pt. 63, subp. RRRRR(Table 2), Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(B), Minn. R. 7011.8030, Minn. R. 7017.1010 & 7017.2015, subp. 3, Minn. R. 7019.0100]
COMG 23	**Ore Crushing & Handling**
5.4.1	The Permittee must limit Filterable Particulate Matter <= 0.005 grains per dry standard cubic foot 3-hour average measured as a flow-weighted mean concentration for all ore crushing and handling emission units in this group. The Permittee must determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b). [40 CFR 63.9590(a), 40 CFR 63.9621(b), 40 CFR 63.9634(b)(1), 40 CFR pt. 63, subp. RRRRR(Table 1)(Item 1)New, Minn. R. 7011.8030]
5.4.2	Crude Ore Concentration: Lead <= 12 milligrams per kilogram 12-month rolling average on a dry basis of crude ore handled by the sources listed in this group. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.4.3	Crude Ore Concentration: Fluorides <= 1.0 milligrams per kilogram 12-month rolling average on a dry basis of crude ore handled by the sources listed in this group. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.4.4	Lead: Sampling Methodology: For the first 12 consecutive months after the Initial Startup Date of ore crushing operations, the Permittee must sample and analyze the lead concentration of the crude ore on a dry basis using EPA Method 6010B on a weekly basis. If after 12 consecutive months, each sample is less than the concentration limit or if the 95% UCL of all samples taken in the previous 12-month period is less than the concentration limit, the sampling

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	frequency may be reduced to monthly. If thereafter, the 95% UCL of all samples taken in the previous 12-month period is greater than the limit, the Permittee must sample and analyze weekly until the 95% UCL of all samples taken in a continuous 12-month period is less than the limit. The Permittee may then reduce the sampling frequency to monthly. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.4.5	Lead: 95% Upper Confidence Level (UCL): The Permittee must use the following method for calculating the crude ore lead concentration 95% UCL: - For samples for which the lead concentration is less than the detection limit, the Permittee must assume a concentration of lead equal to the detection limit. - The Permittee must calculate the 95% UCL using the EPA ProUCL (Version 5.2 or higher) software or other electronic spreadsheet program, as illustrated in Appendix C. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.4.6	Lead: Recordkeeping: By the 28th of each month, the Permittee must calculate and record the crude ore lead concentration for the samples taken in the previous calendar month and must calculate the 12-month rolling average crude ore lead concentration for the previous 12-month period. [Stage 1]. [Minn. R. 7007.0800, subp. 5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.4.7	Fluorides: Sampling Methodology: For the first 12 consecutive months after the Initial Startup Date of ore crushing operations, the Permittee must sample and analyze the fluorides concentration of the crude ore on a dry basis using EPA Method 9056 on a weekly basis. If after 12 consecutive months, each sample is less than the concentration limit or if the 95% UCL of all samples taken in the previous 12-month period is less than the concentration limit, the sampling frequency may be reduced to monthly. If thereafter, the 95% UCL of all samples taken in the previous 12-month period is greater than the limit, the Permittee must sample and analyze weekly until the 95% UCL of all samples taken in a continuous 12-month period is less than the limit. The Permittee may then reduce the sampling frequency to monthly. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.4.8	Fluorides: 95% Upper Confidence Level (UCL): The Permittee must use the following method for calculating the crude ore fluorides concentration 95% UCL: - For samples for which the fluorides concentration is less than the detection limit, the Permittee shall assume a concentration of fluorides equal to the detection limit. - The Permittee must calculate the 95% UCL using the EPA ProUCL (Version 5.2 or higher) software or other electronic spreadsheet program, as illustrated in Appendix C. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.4.9	Fluorides: Recordkeeping: By the 28th of each month, the Permittee must calculate and record the crude ore fluorides concentration for the samples taken in the previous calendar month and must calculate the 12-month rolling average crude ore fluorides concentration for the previous 12-month period. [Stage 1]. [Minn. R. 7007.0800, subp. 5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.4.10	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9581; 40 CFR 63.9582(a)-(c) & (e); 40 CFR 63.9583(c) & (e); 40 CFR 63.9590(a); 40 CFR 63.9600(a); 40 CFR 63.9610(a); 40 CFR 63.9620(a) & (e)-(g); 40 CFR 63.9621(a) & (b);

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	40 CFR 63.9623(a)(1) & (f); 40 CFR 63.9630(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (b); 40 CFR 63.9637; 40 CFR 63.9640(a), (d), & (e); 40 CFR 63.9641(a)-(h); 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; 40 CFR 63.9650; 40 CFR 63.9652; 40 CFR pt. 63, subp. RRRRR, Table 1, Item 1 (new); and 40 CFR pt. 63, subp. RRRRR, Table 4, as specified elsewhere in this permit. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
5.4.11	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. A as follows: 40 CFR 63.1(a); 40 CFR 63.1(b)(1) & (3); 40 CFR 63.1(c)(1) & (2); 40 CFR 63.2; 40 CFR 63.3; 40 CFR 63.4(a)-(c); 40 CFR 63.5(a), (b), & (d)-(f); 40 CFR 63.6(a)(1); 40 CFR 63.6(b)(1)-(5); 40 CFR 63.6(c)(1) & (2); 40 CFR 63.6(e)(1)(iii); 40 CFR 63.6(f)(2) & (3); 40 CFR 63.6(g); 40 CFR 63.6(i)(1)-(6), (8), (9), & (11); 40 CFR 63.6(j); 40 CFR 63.7(a)(3) & (4); 40 CFR 63.7(b)-(d) & (f)-(h); 40 CFR 63.7(e)(2)-(4); 40 CFR 63.9(b)(1), (2), (4), & (5); 40 CFR 63.9(c)-(e) & (h)-(j); 40 CFR 63.10(a)(5)-(7); 40 CFR 63.10(b)(1); 40 CFR 63.10(b)(2)(iii), (vi)-(xii), & (xiv); 40 CFR 63.10(b)(3); 40 CFR 63.10(c)(1)-(6) & (10)-(14); 40 CFR 63.10(d)(1), (2), & (4); 40 CFR 63.10(e)(3); 40 CFR 63.10(f); 40 CFR 63.12; 40 CFR 63.13; 40 CFR 63.14; and

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	40 CFR 63.15(a) & (b). A copy of 40 CFR pt. 63, subp. A is included in Appendix N. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR 63.9650, 40 CFR pt. 63, subp. A, 40 CFR pt. 63, subp. RRRRR(Table 2), Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(B), Minn. R. 7011.8030, Minn. R. 7017.1010 & 7017.2015, subp. 3, Minn. R. 7019.0100]
COMG 26	**Continuous Emission Monitors**
5.5.1	Continuous Operation: CEMS must be operated and data recorded during all periods of emission unit operation including periods of emission unit start-up, shutdown, or malfunction except for periods of acceptable monitor downtime. This requirement applies whether or not a numerical emission limit applies during these periods. A CEMS must not be bypassed except in emergencies where failure to bypass would endanger human health, safety, or plant equipment. Additional requirements for CEMS are found elsewhere in the permit. [Minn. R. 7017.1090]
5.5.2	Monitoring Data: All data points collected by a CEMS shall be used to calculate individual hourly emission averages unless another applicable requirement requires more frequent averaging. Each hourly average starts at the beginning of the hour and ends at the beginning of the following hour. In order for an hour of data to be considered valid, it must contain the following minimum number of data points: A. four data points, equally spaced, if the emission unit operated during the entire hour; B. two data points, at least 15 minutes apart, during periods of monitor calibration or routine maintenance; C. one data point if the emission unit operated for 15 minutes or less during the hour. Monitoring data shall be recorded in the same units of measurement and averaging period as the facility's emission standard. [Minn. R. 7017.1160]
5.5.3	QA Plan: Develop and implement a written quality assurance plan that covers each CEMS. The plan must be on site and available for inspection within 30 days after monitor certification. The plan must include the manufacturer's spare parts list for each CEMS and require that those parts be kept at the facility unless the Commissioner gives written approval to exclude specific spare parts from the list. [Minn. R. 7017.1170, subp. 2]
5.5.4	CEMS Daily Calibration Drift (CD) Test: The CD must be quantified and recorded at zero (low-level) and upscale (high-level) gas concentrations at least once daily according to the procedures listed in Minn. R. 7017.1170, subp. 3(A) and (B), 40 CFR 60.13(d)(1) or 40 CFR pt. 75, Appendix B as applicable for each pollutant concentration, each diluent monitor, and for each monitor range. If no span value is specified in the applicable requirement or in a compliance document, the Permittee must use a span value equivalent to 1.5 times the emission limit. [Minn. R. 7017.1170, subp. 3]
5.5.5	Recordkeeping: The owner or operator must retain records of all CEMS monitoring data and support information for a period of five years from the date of the monitoring sample, measurement or report. Records shall be kept at the source. [Minn. R. 7017.1130]
COMG 45	**Fugitive Sources**
5.6.1	Comply with Fugitive Emission Control Plan: The Permittee shall follow the actions and recordkeeping specified in the fugitive dust control plan in Appendix I of this permit. If the Commissioner determines the Permittee is out of compliance with Minn. R. 7011.0150 or the fugitive control plan, then the Permittee may be required to amend the control plan and/or to install and operate particulate matter ambient monitors as requested by the Commissioner. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]

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5.6.2	Comply with Fugitive Dust Control Plan: The Permittee must follow the actions and recordkeeping specified in the Fugitive Dust Control Plan in Appendix I of this permit. [40 CFR 63.9591(a), 40 CFR 63.9624(c), 40 CFR 63.9635(a), Minn. R. 7011.8030]
5.6.3	The Permittee must maintain a current copy of the Fugitive Dust Control Plan onsite and it must be available for inspection upon request. The Permittee must keep the plan for the life of facility. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.6.4	The Permittee must maintain a current copy of the Fugitive Dust Control Plan onsite and it must be available for inspection upon request. The Permittee must keep the plan for the life of facility or until the facility is no longer subject to the requirements of 40 CFR pt. 63, subp. RRRRR. [40 CFR 63.9591(d), 40 CFR 63.9635(b), Minn. R. 7011.8030]
5.6.5	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9581; 40 CFR 63.9582(c); 40 CFR 63.9583(c) & (e); 40 CFR 63.9591; 40 CFR 63.9600(a); 40 CFR 63.9610(a); 40 CFR 63.9620(h); 40 CFR 63.9624; 40 CFR 63.9635; 40 CFR 63.9637; 40 CFR 63.9640(a) & (e)(1); 40 CFR 63.9641(a)-(d), (g), & (h); 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; 40 CFR 63.9650; 40 CFR 63.9652; and 40 CFR pt. 63, subp. RRRRR, Table 4, as specified elsewhere in this permit. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
5.6.6	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. A as follows: 40 CFR 63.1(b)(1) & (3); 40 CFR 63.1(c)(1) & (2); 40 CFR 63.2; 40 CFR 63.3; 40 CFR 63.4(a)-(c); 40 CFR 63.5(a), (b), & (d)-(f); 40 CFR 63.6(a)(1); 40 CFR 63.6(b)(1)-(5); 40 CFR 63.6(c)(1) & (2); 40 CFR 63.6(e)(1)(iii); 40 CFR 63.6(i)(1)-(6), (8), (9), & (11); 40 CFR 63.6(j); 40 CFR 63.9(b)(1), (2), (4), & (5);

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	40 CFR 63.9(c), (d), & (h)-(j); 40 CFR 63.10(a)(5)-(7); 40 CFR 63.10(b)(1); 40 CFR 63.10(b)(2)(iii), (xii), & (xiv); 40 CFR 63.10(b)(3); 40 CFR 63.10(d)(1), & (4); 40 CFR 63.10(f); 40 CFR 63.12; 40 CFR 63.13; 40 CFR 63.14; and 40 CFR 63.15(a) and (b). A copy of 40 CFR pt. 63, subp. A is included in Appendix N. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(B), Minn. R. 7017.1010 & 7017.2015, subp. 3, Minn. R. 7019.0100]
COMG 47	**Additive Mixing Equipment**
5.7.1	Filterable Particulate Matter <= 0.13 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.7.2	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.7.3	Filterable Particulate Matter <= 0.0025 grains per dry standard cubic foot. [Title I Condition: 40 CFR 63.43(g)(1)(MACT) & Minn. R. 7007.3010]
5.7.4	PM < 10 micron <= 0.13 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.7.5	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.7.6	PM < 2.5 micron <= 0.13 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.7.7	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.7.8	Lead <= 1.5E-04 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent COMG 47 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average concentrate lead concentration value that occurred within the 12 calendar months preceding the most recent COMG 47 performance test. This determination will be made for each COMG 47 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.7.9	Concentrate Concentration: Lead <= 11 milligrams per kilogram 12-month rolling average on a dry basis of concentrate handled by the sources listed in this group. [Minn. R. 7005.0100, subp. 35a]
5.7.10	Fluorides <= 1.3E-05 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent

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	COMG 47 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average concentrate fluorides concentration value that occurred within the 12 calendar months preceding the most recent COMG 47 performance test. This determination will be made for each COMG 47 filterable particulate matter performance test. [Minn. R. 7007.0800, subp. 2]
5.7.11	Concentrate Concentration: Fluorides <= 1.0 milligrams per kilogram 12-month rolling average on a dry basis of concentrate handled by the sources listed in this group. [Minn. R. 7005.0100, subp. 35a]
5.7.12	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.7.13	Lead: Sampling Methodology: For the first 12 consecutive months after initial startup of pelletizing operations, the Permittee must sample and analyze the lead concentration of the concentrate on a dry basis using EPA Method 6010B on a weekly basis. If after 12 consecutive months, each sample is less than the concentration limit or if the 95% UCL of all samples taken in the previous 12-month period is less than the concentration limit, the sampling frequency may be reduced to monthly. If thereafter, the 95% UCL of all samples taken in the previous 12-month period is greater than the limit, the Permittee must sample and analyze weekly until the 95% UCL of all samples taken in a continuous 12-month period is less than the limit. The Permittee may then reduce the sampling frequency to monthly. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.7.14	Lead: 95% Upper Confidence Level (UCL): The Permittee must use the following method for calculating the concentrate lead concentration 95% UCL: - For samples for which the lead concentration is less than the detection limit, the Permittee must assume a concentration of lead equal to the detection limit. - The Permittee must calculate the 95% UCL using the EPA ProUCL (Version 5.2 or higher) software or other electronic spreadsheet program, as illustrated in Appendix C. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.7.15	Lead: Recordkeeping: By the 28th of each month, the Permittee must calculate and record the concentrate lead concentration for the samples taken in the previous calendar month and must calculate the 12-month rolling average concentrate lead concentration for the previous 12-month period. [Stage 1]. [Minn. R. 7007.0800, subp. 5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.7.16	Fluorides: Sampling Methodology: For the first 12 consecutive months after the Initial Startup Date of pelletizing operations, the Permittee must sample and analyze the fluorides concentration on a dry basis of the concentrate using EPA Method 9056 on a weekly basis. If after 12 consecutive months, each sample is less than the concentration limit or if the 95% UCL of all samples taken in the previous 12-month period is less than the concentration limit, the sampling frequency may be reduced to monthly. If thereafter, the 95% UCL of all samples taken in the previous 12-month period is greater than the limit, the Permittee must sample and analyze weekly until the 95% UCL of all samples taken in a continuous 12-month period is less than the limit. The Permittee may then reduce the sampling frequency to monthly. [Minn. R. 7007.0800, subp. 4]
5.7.17	Fluorides: 95% Upper Confidence Level (UCL): The Permittee must use the following method for calculating the concentrate fluorides concentration 95% UCL: - For samples for which the fluorides concentration is less than the detection limit, the Permittee shall assume a concentration of fluorides equal to the detection limit. - The Permittee must calculate the 95% UCL using the EPA ProUCL (Version 5.2 or higher) software or other electronic spreadsheet program, as illustrated in Appendix C. [Minn. R. 7007.0800, subp. 4]
5.7.18	Fluorides: Recordkeeping: By the 28th of each month, the Permittee must calculate and record the concentrate fluorides concentration for the samples taken in the previous calendar month and must

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	calculate the 12-month rolling average concentrate fluorides concentration for the previous 12-month period. [Minn. R. 7007.0800, subp. 5]
5.7.19	Visible Emissions: The Permittee shall check the fabric filter stacks for any visible emissions, using the Visible Emissions Check List included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010]
5.7.20	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 5]
5.7.21	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall follow the O&M Plan for the fabric filter and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subps. 4&5]
COMG 48	**Pellet Powder Coating Equipment**
5.8.1	Filterable Particulate Matter <= 0.0048 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.8.2	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.8.3	Filterable Particulate Matter <= 0.0025 grains per dry standard cubic foot 3-hour average. [Title I Condition: 40 CFR 63.43(g)(1)(MACT) & Minn. R. 7007.3010]
5.8.4	PM < 10 micron <= 0.0048 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.8.5	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.8.6	PM < 2.5 micron <= 0.0048 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.8.7	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.8.8	Lead <= 9.6E-06 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent COMG 48 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average powder coating lead concentration value that occurred within the 12 calendar months preceding the most recent COMG 48 performance test. This determination will be made for each COMG 48 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.8.9	Powder Coating Concentration: Lead <= 2.3 milligrams per kilogram 12-month rolling average on a dry basis of powder coating handled by the sources listed in this group. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.8.10	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.8.11	Lead: For each powder coating shipment, the Permittee must obtain a certification from the supplier, stating the percent lead by weight in the powder coating. If a lead content range is provided, the highest value in the range must be used in all compliance calculations. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]

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5.8.12	Lead: Recordkeeping: By the 28th of each month, the Permittee must identify and record the highest powder coating lead concentration from the shipments received in the previous calendar month and must calculate the 12-month rolling average powder coating lead concentration for the previous 12-month period. [Stage 1]. [Minn. R. 7007.0800, subp. 5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.8.13	Visible Emissions: The Permittee shall check the fabric filter stacks for any visible emissions, using the Visible Emissions Check List included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010]
5.8.14	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 5]
5.8.15	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall follow the O&M Plan for the fabric filter and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subps. 4&5]
COMG 49	**Pellet Bunker Equipment**
5.9.1	Filterable Particulate Matter <= 1.1 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.9.2	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.9.3	PM < 10 micron <= 1.1 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.9.4	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.9.5	PM < 2.5 micron <= 1.1 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.9.6	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.9.7	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
COMG 50	**Pellet Discharge Equipment**
5.10.1	Filterable Particulate Matter <= 1.0 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.10.2	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.10.3	PM < 10 micron <= 1.0 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.10.4	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.10.5	PM < 2.5 micron <= 1.0 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R.

Requirement number	Requirement and citation
	7007.3000]
5.10.6	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.10.7	Lead <= 2.0E-06 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent COMG 50 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average pellet lead concentration value (as determined by the requirements of COMG 2) that occurred within the 12 calendar months preceding the most recent COMG 50 performance test. This determination will be made for each COMG 50 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.10.8	Fluorides <= 5.1E-05 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent COMG 50 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average pellet fluorides concentration value (as determined by the requirements of COMG 2) that occurred within the 12 calendar months preceding the most recent COMG 50 performance test. This determination will be made for each COMG 50 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.10.9	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
COMG 51	**Hearth Layer Separation Equipment**
5.11.1	Filterable Particulate Matter <= 0.46 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.11.2	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.11.3	PM < 10 micron <= 0.46 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.11.4	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.11.5	PM < 2.5 micron <= 0.46 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.11.6	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.11.7	Lead <= 9.2E-07 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent COMG 51 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average pellet lead concentration value (as determined by the requirements of COMG 2) that occurred within the 12 calendar months preceding the most recent COMG 51 performance test. This determination will be made for each COMG 51 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.11.8	Fluorides <= 2.3E-05 pounds per hour 3-hour average.

Requirement number	Requirement and citation
	To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent COMG 51 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average pellet fluorides concentration value (as determined by the requirements of COMG 2) that occurred within the 12 calendar months preceding the most recent COMG 51 performance test. This determination will be made for each COMG 51 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.11.9	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
COMG 52	**Secondary Crusher Line 1 Equipment**
5.12.1	Filterable Particulate Matter <= 0.42 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.12.2	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.12.3	PM < 10 micron <= 0.42 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.12.4	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.12.5	PM < 2.5 micron <= 0.42 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.12.6	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.12.7	Lead <= 5.0E-06 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent COMG 52 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore lead concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent COMG 52 performance test. This determination will be made for each COMG 52 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.12.8	Fluorides <= 4.2E-07 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent COMG 52 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore fluorides concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent COMG 52 performance test. This determination will be made for each COMG 52 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.12.9	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
COMG 53	**Secondary Crusher Line 2 Equipment**
5.13.1	Filterable Particulate Matter <= 0.42 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.13.2	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.13.3	PM < 10 micron <= 0.42 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR

Requirement number	Requirement and citation
	52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.13.4	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.13.5	PM < 2.5 micron <= 0.42 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.13.6	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.13.7	Lead <= 5.0E-06 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent COMG 53 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore lead concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent COMG 53 performance test. This determination will be made for each COMG 53 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.13.8	Fluorides <= 4.2E-07 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent COMG 53 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore fluorides concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent COMG 53 performance test. This determination will be made for each COMG 53 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.13.9	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
COMG 54	**Secondary Crusher Line 3 Equipment**
5.14.1	Filterable Particulate Matter <= 0.42 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.14.2	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.14.3	PM < 10 micron <= 0.42 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.14.4	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.14.5	PM < 2.5 micron <= 0.42 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.14.6	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.14.7	Lead <= 5.0E-06 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent

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	COMG 54 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore lead concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent COMG 54 performance test. This determination will be made for each COMG 54 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.14.8	Fluorides <= 4.2E-07 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent COMG 54 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore fluorides concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent COMG 54 performance test. This determination will be made for each COMG 54 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.14.9	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
COMG 55	**Secondary Crusher Line 4 Equipment**
5.15.1	Filterable Particulate Matter <= 0.42 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.15.2	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.15.3	PM < 10 micron <= 0.42 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.15.4	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.15.5	PM < 2.5 micron <= 0.42 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.15.6	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.15.7	Lead <= 5.0E-06 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent COMG 55 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore lead concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent COMG 55 performance test. This determination will be made for each COMG 55 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.15.8	Fluorides <= 4.2E-07 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent COMG 55 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore fluorides concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent COMG 55 performance test. This determination will be made for each COMG 55 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.15.9	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]

Requirement number	Requirement and citation
COMG 56	**Primary Crusher Building Equipment**
5.16.1	Filterable Particulate Matter <= 0.089 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.16.2	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.16.3	PM < 10 micron <= 0.089 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.16.4	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.16.5	PM < 2.5 micron <= 0.089 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.16.6	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.16.7	Lead <= 1.1E-06 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent COMG 56 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore lead concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent COMG 56 performance test. This determination will be made for each COMG 56 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.16.8	Fluorides <= 8.9E-08 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent COMG 56 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore fluorides concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent COMG 56 performance test. This determination will be made for each COMG 56 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.16.9	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
COMG 57	**Coarse Ore Storage Conveyor Equipment**
5.17.1	Filterable Particulate Matter <= 0.074 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.17.2	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.17.3	PM < 10 micron <= 0.074 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.17.4	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.17.5	PM < 2.5 micron <= 0.074 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]

Requirement number	Requirement and citation
5.17.6	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.17.7	Lead <= 8.9E-07 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent COMG 57 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore lead concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent COMG 57 performance test. This determination will be made for each COMG 57 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.17.8	Fluorides <= 7.4E-08 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent COMG 57 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore fluorides concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent COMG 57 performance test. This determination will be made for each COMG 57 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.17.9	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
COMG 58	**Fine Ore Storage Conveyor Equipment**
5.18.1	Filterable Particulate Matter <= 0.074 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.18.2	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.18.3	PM < 10 micron <= 0.074 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.18.4	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.18.5	PM < 2.5 micron <= 0.074 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.18.6	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.18.7	Lead <= 8.9E-07 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent COMG 58 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore lead concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent COMG 58 performance test. This determination will be made for each COMG 58 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.18.8	Fluorides <= 7.4E-08 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent

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	COMG 58 filterable particulate matter performance test result (in units of pounds per hour) by the highest crude ore 12-month rolling average fluorides concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent COMG 58 performance test. This determination will be made for each COMG 58 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.18.9	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
COMG 59	**Storage Bin 1 Equipment**
5.19.1	Filterable Particulate Matter <= 0.045 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.19.2	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.19.3	PM < 10 micron <= 0.045 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.19.4	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.19.5	PM < 2.5 micron <= 0.045 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.19.6	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.19.7	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
COMG 60	**Storage Bin 2 Equipment**
5.20.1	Filterable Particulate Matter <= 0.045 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.20.2	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.20.3	PM < 10 micron <= 0.045 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.20.4	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.20.5	PM < 2.5 micron <= 0.045 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.20.6	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.20.7	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
COMG 61	**Bentonite Bin Equipment**
5.21.1	Filterable Particulate Matter <= 0.045 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]

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5.21.2	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.21.3	PM < 10 micron <= 0.045 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.21.4	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.21.5	PM < 2.5 micron <= 0.045 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.21.6	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.21.7	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
COMG 62	**Dolomite Bin Equipment**
5.22.1	Filterable Particulate Matter <= 0.17 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.22.2	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.22.3	PM < 10 micron <= 0.17 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.22.4	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.22.5	PM < 2.5 micron <= 0.17 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.22.6	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.22.7	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
COMG 63	**Limestone Bin Equipment**
5.23.1	Filterable Particulate Matter <= 0.17 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.23.2	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.23.3	Filterable Particulate Matter <= 0.0025 grains per dry standard cubic foot 3-hour average. [Title I Condition: 40 CFR 63.43(g)(1)(MACT) & Minn. R. 7007.3010]
5.23.4	PM < 10 micron <= 0.17 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.23.5	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) &

Requirement number	Requirement and citation
	Minn. R. 7007.3000]
5.23.6	PM < 2.5 micron <= 0.17 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.23.7	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.23.8	Lead <= 3.9E-07 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent COMG 63 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average limestone lead concentration value (as determined by the requirements of EQUI 191) that occurred within the 12 calendar months preceding the most recent COMG 63 performance test. This determination will be made for each COMG 63 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.23.9	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.23.10	Visible Emissions: The Permittee shall check the fabric filter stacks for any visible emissions, using the Visible Emissions Check List included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010]
5.23.11	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 5]
5.23.12	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall follow the O&M Plan for the fabric filter and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subps. 4&5]
COMG 64	**Organic Binder and Sodium Carbonate Bins Equipment**
5.24.1	Filterable Particulate Matter <= 0.045 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.24.2	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.24.3	Filterable Particulate Matter <= 0.0025 grains per dry standard cubic foot 3-hour average. [Title I Condition: 40 CFR 63.43(g)(1)(MACT) & Minn. R. 7007.3000]
5.24.4	PM < 10 micron <= 0.045 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.24.5	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.24.6	PM < 2.5 micron <= 0.045 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.24.7	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.24.8	Lead <= 1.0E-07 pounds per hour 3-hour average.

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	To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent COMG 64 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average organic binder and sodium carbonate lead concentration value (as determined by the requirements of EQUI 193 and EQUI 214) that occurred within the 12 calendar months preceding the most recent COMG 64 performance test. This determination will be made for each COMG 64 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.24.9	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.24.10	Visible Emissions: The Permittee shall check the fabric filter stacks for any visible emissions, using the Visible Emissions Check List included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010]
5.24.11	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 5]
5.24.12	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall follow the O&M Plan for the fabric filter and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subps. 4&5]
COMG 65	**Hearth Layer Equipment**
5.25.1	Filterable Particulate Matter <= 0.13 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.25.2	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.25.3	PM < 10 micron <= 0.13 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.25.4	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.25.5	PM < 2.5 micron <= 0.13 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.25.6	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.25.7	Lead <= 2.6E-07 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent COMG 65 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average pellet lead concentration value (as determined by the requirements of COMG 2) that occurred within the 12 calendar months preceding the most recent COMG 65 performance test. This determination will be made for each COMG 65 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.25.8	Fluorides <= 6.5E-06 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent COMG 65 filterable particulate matter performance test result (in units of pounds per hour) by the

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	highest 12-month rolling average pellet fluorides concentration value (as determined by the requirements of COMG 2) that occurred within the 12 calendar months preceding the most recent COMG 65 performance test. This determination will be made for each COMG 65 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.25.9	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
COMG 66	**Product Junction House 4 Equipment**
5.26.1	Filterable Particulate Matter <= 0.53 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.26.2	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.26.3	PM < 10 micron <= 0.53 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.26.4	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.26.5	PM < 2.5 micron <= 0.53 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.26.6	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.26.7	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
COMG 67	**Mercury Continuous Emission Monitors**
5.27.1	Continuous Operation: CEMS must be operated and data recorded during all periods of emission unit operation including periods of emission unit start-up, shutdown, or malfunction except for periods of acceptable monitor downtime. This requirement applies whether or not a numerical emission limit applies during these periods. A CEMS must not be bypassed except in emergencies where failure to bypass would endanger human health, safety, or plant equipment. Additional requirements for CEMS are found elsewhere in the permit. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D)]
5.27.2	Monitoring Data: All data points collected by a CEMS shall be used to calculate individual hourly emission averages unless another applicable requirement requires more frequent averaging. Each hourly average starts at the beginning of the hour and ends at the beginning of the following hour. In order for an hour of data to be considered valid, it must contain the following minimum number of data points: A. four data points, equally spaced, if the emission unit operated during the entire hour; B. two data points, at least 15 minutes apart, during periods of monitor calibration or routine maintenance; C. one data point if the emission unit operated for 15 minutes or less during the hour. Monitoring data shall be recorded in the same units of measurement and averaging period as the facility's emission standard.

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	This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D)]
5.27.3	QA Plan: Develop and implement a written quality assurance plan that covers each CEMS. The plan must be on site and available for inspection within 30 days after monitor certification. The plan must include the manufacturer's spare parts list for each CEMS and require that those parts be kept at the facility unless the Commissioner gives written approval to exclude specific spare parts from the list. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D)]
5.27.4	CEMS Daily Calibration Drift (CD) Test: The CD must be quantified and recorded at zero (low-level) and upscale (high-level) gas concentrations at least once daily according to the procedures listed in Minn. R. 7017.1170, subp. 3(A) and (B), 40 CFR 60.13(d)(1) or 40 CFR pt. 75, Appendix B as applicable for each pollutant concentration, each diluent monitor, and for each monitor range. If no span value is specified in the applicable requirement or in a compliance document, the Permittee must use a span value equivalent to 1.5 times the emission limit. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D)]
5.27.5	Recordkeeping: The owner or operator must retain records of all CEMS monitoring data and support information for a period of five years from the date of the monitoring sample, measurement or report. Records shall be kept at the source. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D)]
5.27.6	The Permittee must: - conduct a performance evaluation of the CEMS within 180 days of installation of the monitoring system; and - install, certify, calibrate, operate, and maintain the CEMS according to the requirements of Performance Specifications 6 and 12A of 40 CFR pt. 60, Appendix B and Quality Assurance Procedure 5 of 40 CFR pt. 60, Appendix F. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D)]
EQUI 20	**Indurating Furnace Hood Exhaust Stack CO CEMS**
5.28.1	Carbon Monoxide: Emissions Monitoring: The Permittee shall use a CEMS to measure carbon monoxide emissions from EQUI 257. [Stage 1]. [Minn. R. 7017.1006, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
EQUI 21	**Indurating Furnace Hood Exhaust Stack SO2 CEMS**
5.29.1	Sulfur Dioxide: Emissions Monitoring: The Permittee shall use a CEMS to measure sulfur dioxide emissions from EQUI 257. [Stage 1]. [Minn. R. 7017.1006, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.29.2	Sulfuric Acid Mist: The Permittee shall use the results from the SO2 CEMS (EQUI 21) and the equations in Appendix F to determine sulfuric acid mist emissions from EQUI 257. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
EQUI 24	**Indurating Furnace Waste Gas Stack CO CEMS**
5.30.1	Carbon Monoxide: Emissions Monitoring: The Permittee shall use a CEMS to measure carbon monoxide emissions from EQUI 258. [Stage 1]. [Minn. R. 7017.1006, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]

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EQUI 25	**Indurating Furnace Waste Gas Stack SO2 CEMS**
5.31.1	Sulfur Dioxide: Emissions Monitoring: The Permittee shall maintain and operate a CEMS that continuously indicates and records the SO2 emissions from EQUI 258. The recording device shall also calculate the one-hour average SO2 emission rate. [Stage 1]. [40 CFR 64.3(b)(4)ii, Minn. R. 7017.0200, Minn. R. 7017.1006, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.31.2	Sulfuric Acid Mist: The Permittee shall use the results from the SO2 CEMS (EQUI 21) and the equations in Appendix F to determine sulfuric acid mist emissions from EQUI 258. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
EQUI 41	**Indurating Furnace Hood Exhaust Stack O2 CEMS**
5.32.1	Oxygen: Emissions Monitoring: The Permittee shall use a CEMS to measure oxygen emissions from EQUI 257. [Stage 1]. [Minn. R. 7017.1006, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
EQUI 43	**Indurating Furnace Hood Exhaust Stack NOx CEMS**
5.33.1	Nitrogen Oxides: Emissions Monitoring: The Permittee shall use a CEMS to measure nitrogen oxides emissions from EQUI 257. [Stage 1]. [Minn. R. 7017.1006, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
EQUI 47	**Indurating Furnace Waste Gas Stack O2 CEMS**
5.34.1	Oxygen: Emissions Monitoring: The Permittee shall use a CEMS to measure oxygen emissions from EQUI 258. [Stage 1]. [Minn. R. 7017.1006, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
EQUI 49	**Indurating Furnace Waste Gas Stack NOx CEMS**
5.35.1	Nitrogen Oxides: Emissions Monitoring: The Permittee shall use a CEMS to measure nitrogen oxides emissions from EQUI 258. [Stage 1]. [Minn. R. 7017.1006, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
EQUI 110	**Coarse Ore Mill Bay Tunnel 1**
5.36.1	The Permittee must vent emissions from EQUI 110 to control equipment meeting the requirements of TREA 68 whenever EQUI 110 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.36.2	The Permittee must vent emissions from EQUI 110 to control equipment meeting the requirements of TREA 68 whenever EQUI 110 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.36.3	Filterable Particulate Matter <= 0.11 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.36.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.36.5	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.36.6	PM < 10 micron <= 0.11 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.36.7	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]

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5.36.8	PM < 2.5 micron <= 0.11 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.36.9	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.36.10	Lead <= 1.3E-06 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent EQUI 110 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore lead concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent EQUI 110 performance test. This determination will be made for each EQUI 110 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.36.11	Fluorides <= 1.1E-07 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent EQUI 110 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore fluorides concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent EQUI 110 performance test. This determination will be made for each EQUI 110 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.36.12	Opacity <= 0 percent opacity 6-minute average except for one 6-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.36.13	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.36.14	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.36.15	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9;

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	40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 111	**Fine Ore Mill Bay Tunnel 1A**
5.37.1	The Permittee must vent emissions from EQUI 111 to control equipment meeting the requirements of TREA 6 whenever EQUI 111 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.37.2	The Permittee must vent emissions from EQUI 111 to control equipment meeting the requirements of TREA 6 whenever EQUI 111 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.37.3	Filterable Particulate Matter <= 0.073 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.37.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.37.5	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.37.6	PM < 10 micron <= 0.073 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.37.7	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.37.8	PM < 2.5 micron <= 0.073 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.37.9	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.37.10	Lead <= 8.8E-07 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent EQUI 111 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore lead concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent EQUI 111 performance test. This determination will be made for each EQUI 111 filterable particulate matter

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	performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.37.11	Fluorides <= 7.3E-08 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent EQUI 111 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore fluorides concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent EQUI 111 performance test. This determination will be made for each EQUI 111 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.37.12	Opacity <= 0 percent opacity 6-minute average except for one 6-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.37.13	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.37.14	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.37.15	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A),

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	Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 112	**Mixing Conveyor**
5.38.1	The Permittee must vent emissions from EQUI 112 to control equipment meeting the requirements of TREA 139 whenever EQUI 112 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.38.2	The Permittee must vent emissions from EQUI 112 to control equipment meeting the requirements of TREA 139 whenever EQUI 112 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.38.3	The Permittee must limit Filterable Particulate Matter <= 0.032 grams per dry standard cubic meter 3-hour average (0.014 grains per dry standard cubic foot). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]
5.38.4	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows: 40 CFR 60.670(a)(1); 40 CFR 60.670(d)(1)-(3); 40 CFR 60.670(e) & (f); 40 CFR 60.671; 40 CFR 60.672(a); 40 CFR 60.673(a) & (b); 40 CFR 60.674(d); 40 CFR 60.675(a), (b), & (e); 40 CFR 60.675(b)(1); 40 CFR 60.675(e); 40 CFR 60.675(e)(2)-(4); 40 CFR 60.675(e)(2)(i)-(iii); 40 CFR 60.676(a); 40 CFR 60.676(a)(3); 40 CFR 60.676(a)(3)(i) & (ii); 40 CFR 60.676(b)(2); 40 CFR 60.676(f), (h), (i), & (k); 40 CFR 60.676(i)(1); 40 CFR pt. 60, subp. OOO, Table 1, as specified elsewhere in this permit; and 40 CFR pt. 60, subp. OOO, Table 2 (after April 22, 2008; PM limit only). A copy of 40 CFR pt. 60, subp. OOO is included in Appendix L. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]
5.38.5	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5;

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	40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(3) & (4); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a), (d), (f), & (g); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
5.38.6	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. A as follows: 40 CFR 63.1(a); 40 CFR 63.1(b)(1) & (b)(3); 40 CFR 63.1(c)(1) & (2); 40 CFR 63.2; 40 CFR 63.3; 40 CFR 63.4(a)-(c); 40 CFR 63.5(a), (b), & (d)-(f); 40 CFR 63.6(a)(1); 40 CFR 63.6(b)(1)-(5); 40 CFR 63.6(c)(1) & (2); 40 CFR 63.6(e)(1) & (3); 40 CFR 63.6(f) & (g); 40 CFR 63.6(i)(1)-(6), (8), (9), & (11); 40 CFR 63.6(j); 40 CFR 63.7(a)(2)-(4); 40 CFR 63.7(a)(2)(ix); 40 CFR 63.7(b)-(h); 40 CFR 63.9(b)(1), (2), (4), & (5); 40 CFR 63.9(c)-(e), & (h)-(j); 40 CFR 63.10(a)(5)-(7); 40 CFR 63.10(b)(1) & (3); 40 CFR 63.10(b)(2)(i)-(v), (ix), (xii), & (xiv); 40 CFR 63.10(d)(1), (2), (4), & (5); 40 CFR 63.10(f); 40 CFR 63.11(a); 40 CFR 63.12; 40 CFR 63.13; 40 CFR 63.14; and 40 CFR 63.15(a) & (b). A copy of 40 CFR pt. 63, subp. A is included in Appendix N. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of

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	promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(B), Minn. R. 7017.1010 & 7017.2015, subp. 3, Minn. R. 7019.0100]
EQUI 113	**Mixer**
5.39.1	The Permittee must vent emissions from EQUI 113 to control equipment meeting the requirements of TREA 139 whenever EQUI 113 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) and Minn. R. 7007.3000]
5.39.2	The Permittee must vent emissions from EQUI 113 to control equipment meeting the requirements of TREA 139 whenever EQUI 113 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.39.3	The Permittee must limit Concentrate Process Throughput <= 7.00 million metric tons per year 12-month rolling sum to be calculated by the 15th day of each month for the previous 12-month period as described later in this permit. [Stage 1]. [Minn. R. 7005.0100, subd. 35a, Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a), Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.39.4	Particulate Matter <= 0.30 grains per dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. Because it has been shown that the facility does not cause a violation of ambient air quality standards, and is located outside the Mpls/St. Paul air quality control region and the city of Duluth, and is located at least 1/4 mile from any residence or public roadway, and the industrial process equipment is controlled by control equipment which has a collection efficiency of 85% by weight, this industrial process equipment is considered to be in compliance with this requirement. [Minn. R. 7011.0715, subps. 1(A) and 3]
5.39.5	Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)]
5.39.6	Process Throughput: Daily Recordkeeping. On each day of operation the Permittee must calculate, record, and maintain a record of the total quantity of concentrate throughput. This must be based on weight scale measurements and recorded in written logs. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.39.7	Process Throughput: Monthly Recordkeeping. By the 15th of the month, the Permittee must calculate and record the following: - The total concentrate process throughput for EQUI 113 for the previous calendar month using the daily records; and - The 12-month rolling sum of concentrate process throughput for the previous 12-month period by summing the monthly process throughput used for the previous 12 months. [Minn. R. 7007.0800, subps. 4-5]
5.39.8	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. A as follows: 40 CFR 63.1(a); 40 CFR 63.1(b)(1) & (b)(3); 40 CFR 63.1(c)(1) & (2); 40 CFR 63.2; 40 CFR 63.3; 40 CFR 63.4(a)-(c);

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	40 CFR 63.5(a), (b), & (d)-(f); 40 CFR 63.6(a)(1); 40 CFR 63.6(b)(1)-(5); 40 CFR 63.6(c)(1) & (2); 40 CFR 63.6(e)(1) & (3); 40 CFR 63.6(f) & (g); 40 CFR 63.6(i)(1)-(6), (8), (9), & (11); 40 CFR 63.6(j); 40 CFR 63.7(a)(2)-(4); 40 CFR 63.7(a)(2)(ix); 40 CFR 63.7(b)-(h); 40 CFR 63.9(b)(1), (2), (4), & (5); 40 CFR 63.9(c)-(e), & (h)-(j); 40 CFR 63.10(a)(5)-(7); 40 CFR 63.10(b)(1) & (3); 40 CFR 63.10(b)(2)(i)-(v), (ix), (xii), & (xiv); 40 CFR 63.10(d)(1), (2), (4), & (5); 40 CFR 63.10(f); 40 CFR 63.11(a); 40 CFR 63.12; 40 CFR 63.13; 40 CFR 63.14; and 40 CFR 63.15(a) & (b). A copy of 40 CFR pt. 63, subp. A is included in Appendix N. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(B), Minn. R. 7017.1010 & 7017.2015, subp. 3, Minn. R. 7019.0100]
EQUI 114	**Hearth Layer Grate Feed**
5.40.1	The Permittee must vent emissions from EQUI 114 to control equipment meeting the requirements of TREA 11 whenever EQUI 114 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.40.2	The Permittee must vent emissions from EQUI 114 to control equipment meeting the requirements of TREA 11 whenever EQUI 114 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.40.3	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.40.4	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.40.5	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and

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	40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.40.6	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 122	**Mercury Control Carbon Bin**
5.41.1	The Permittee must vent emissions from EQUI 122 to control equipment meeting the requirements of TREA 51 whenever EQUI 122 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.41.2	The Permittee must vent emissions from EQUI 122 to control equipment meeting the requirements of TREA 51 whenever EQUI 122 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.41.3	Filterable Particulate Matter <= 0.016 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.41.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.41.5	Particulate Matter <= 0.30 grains per dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735.

Requirement number	Requirement and citation
	Because it has been shown that the facility does not cause a violation of ambient air quality standards, and is located outside the Mpls/St. Paul air quality control region and the city of Duluth, and is located at least 1/4 mile from any residence or public roadway, and the industrial process equipment is controlled by control equipment which has a collection efficiency of 85% by weight, this industrial process equipment is considered to be in compliance with this requirement. [Minn. R. 7011.0715, subps. 1(A) and 3]
5.41.6	PM < 10 micron <= 0.016 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.41.7	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.41.8	PM < 2.5 micron <= 0.016 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.41.9	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.41.10	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.41.11	Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)]
EQUI 123	**Scrubber Control Lime Bin**
5.42.1	The Permittee must vent emissions from EQUI 123 to control equipment meeting the requirements of TREA 52 whenever EQUI 123 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.42.2	The Permittee must vent emissions from EQUI 123 to control equipment meeting the requirements of TREA 52 whenever EQUI 123 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.42.3	Filterable Particulate Matter <= 0.016 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.42.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.42.5	Particulate Matter <= 0.30 grains per dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. Because it has been shown that the facility does not cause a violation of ambient air quality standards, and is located outside the Mpls/St. Paul air quality control region and the city of Duluth, and is located at least 1/4 mile from any residence or public roadway, and the industrial process equipment is controlled by control equipment which has a collection efficiency of 85% by weight, this industrial process equipment is considered to be in compliance with this requirement. [Minn. R. 7011.0715, subps. 1(A) and 3]
5.42.6	PM < 10 micron <= 0.016 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.42.7	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I

Requirement number	Requirement and citation
	Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.42.8	PM < 2.5 micron <= 0.016 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.42.9	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.42.10	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.42.11	Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)]
EQUI 124	**Hearth Layer Feed Bin**
5.43.1	The Permittee must vent emissions from EQUI 124 to control equipment meeting the requirements of TREA 11 whenever EQUI 124 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling)& Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.43.2	The Permittee must vent emissions from EQUI 124 to control equipment meeting the requirements of TREA 11 whenever EQUI 124 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.43.3	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.43.4	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.43.5	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.43.6	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8;

Requirement number	Requirement and citation
	40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 127	**Pellet Discharge**
5.44.1	The Permittee must vent emissions from EQUI 127 to control equipment meeting the requirements of TREA 16 whenever EQUI 127 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.44.2	The Permittee must vent emissions from EQUI 127 to control equipment meeting the requirements of TREA 16 whenever EQUI 127 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.44.3	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.44.4	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.44.5	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.44.6	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b);

Requirement number	Requirement and citation
	40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 131	**Primary Ore Crusher**
5.45.1	The Permittee must vent emissions from EQUI 131 to control equipment meeting the requirements of TREA 150 whenever EQUI 131 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.45.2	The Permittee must vent emissions from EQUI 131 to control equipment meeting the requirements of TREA 150 whenever EQUI 131 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.45.3	The Permittee must limit Crude Ore Process Throughput <= 26.2 million long tons per year 12-month rolling sum to be calculated by the 15th day of each month for the previous 12-month period as described later in this permit. [Stage 1]. [Minn. R. 7005.0100, subp. 35a, Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a), Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.45.4	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.45.5	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.45.6	Process Throughput: Daily Recordkeeping. On each day of operation the Permittee must calculate, record, and maintain a record of the total quantity of crude ore unloaded to EQUI 131. This must be based on weight scale measurements and recorded in written logs. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.45.7	Process Throughput: Monthly Recordkeeping. By the 15th of the month, the Permittee must calculate and record the following: - The total crude ore process throughput for EQUI 131 for the previous calendar month using the daily records; and - The 12-month rolling sum of process throughput for the previous 12-month period by summing the monthly process throughput used for the previous 12 months. [Minn. R. 7007.0800, subps. 4-5]
5.45.8	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380;

Requirement number	Requirement and citation
	40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.45.9	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 132	**Grizzly Scalping Screen**
5.46.1	The Permittee must vent emissions from EQUI 132 to control equipment meeting the requirements of TREA 1 whenever EQUI 132 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.46.2	The Permittee must vent emissions from EQUI 132 to control equipment meeting the requirements of TREA 1 whenever EQUI 132 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.46.3	Filterable Particulate Matter <= 0.36 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.46.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1].

Requirement number	Requirement and citation
	[Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.46.5	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.46.6	PM < 10 micron <= 0.36 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.46.7	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.46.8	PM < 2.5 micron <= 0.36 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.46.9	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.46.10	Lead <= 4.3E-06 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent EQUI 132 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore lead concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent EQUI 132 performance test. This determination will be made for each EQUI 132 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.46.11	Fluorides <= 3.6E-07 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent EQUI 132 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore fluorides concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent EQUI 132 performance test. This determination will be made for each EQUI 132 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.46.12	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.46.13	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.46.14	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.46.15	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:

Requirement number	Requirement and citation
	40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 135	**Pellet Transfer to Hearth Layer Bin**
5.47.1	The Permittee must vent emissions from EQUI 135 to control equipment meeting the requirements of TREA 11, TREA 16, and TREA 17 whenever EQUI 135 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.47.2	The Permittee must vent emissions from EQUI 135 to control equipment meeting the requirements of TREA 11, TREA 16, and TREA 17 whenever EQUI 135 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.47.3	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.47.4	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.47.5	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of

Requirement number	Requirement and citation
	promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.47.6	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 138	**Concentrator Fire Water Supply Pump**
5.48.1	Filterable Particulate Matter <= 0.15 grams per horsepower-hour. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.48.2	The Permittee must limit Particulate Matter <= 0.15 grams per horsepower-hour. [40 CFR 60.4205(c), 40 CFR 63.6590(c), 40 CFR pt. 60, subp. IIII(Table 4), Minn. R. 7011.2305, Minn. R. 7011.8150]
5.48.3	PM < 10 micron <= 0.15 grams per horsepower-hour. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.48.4	PM < 2.5 micron <= 0.15 grams per horsepower-hour. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.48.5	Carbon Monoxide <= 2.6 grams per horsepower-hour. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.48.6	The Permittee must limit Carbon Monoxide <= 2.6 grams per horsepower-hour. [40 CFR 60.4205(c), 40 CFR 63.6590(c), 40 CFR pt. 60, subp. IIII(Table 4), Minn. R. 7011.2305, Minn. R. 7011.8150]
5.48.7	NMHC+NOx <= 3.0 grams per horsepower-hour. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.48.8	The Permittee must limit NMHC+NOx <= 3.0 grams per horsepower-hour. [40 CFR 60.4205(c), 40 CFR 63.6590(c), 40 CFR pt. 60, subp. IIII(Table 4), Minn. R. 7011.2305, Minn. R. 7011.8150]
5.48.9	Sulfur Dioxide <= 0.0015 pounds per million Btu heat input. The potential to emit from the unit is 0.0015 lb/MMBtu due to equipment design and allowable fuels. [Minn. R. 7011.2300, subp. 2(B)]
5.48.10	Opacity <= 5 percent opacity 6-minute average once operating temperatures have been attained. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]

Requirement number	Requirement and citation
5.48.11	Opacity <= 20 percent opacity once operating temperatures have been attained. [Minn. R. 7011.2300, subp. 1]
5.48.12	Fuel type: The Permittee shall use only #1 diesel, #2 diesel, or #2 fuel oil. [Minn. R. 7005.0100, subp. 35a]
5.48.13	Sulfur Content of Fuel <= 0.0015 percent by weight. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.48.14	The Permittee must limit Sulfur Content of Fuel <= 15 parts per million and either a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume, as required by 40 CFR 1090.305. [40 CFR 60.4207(b), 40 CFR 63.6590(c), Minn. R. 7011.2305, Minn. R. 7011.8150]
5.48.15	Fuel Supplier Certification: The Permittee shall obtain and maintain a fuel supplier certification for each shipment of diesel fuel oil, certifying that the sulfur content does not exceed 0.0015 percent by weight. [Minn. R. 7007.0800, subps. 4-5]
5.48.16	The Permittee shall keep records of fuel type and usage on a monthly basis. [Minn. R. 7007.0800, subp. 5]
5.48.17	Hours of Operation: The Permittee shall maintain documentation on site that the unit is an emergency generator by design that qualifies under the U.S. EPA memorandum entitled "Calculating Potential to Emit (PTE) for Emergency Generators" dated September 6, 1995, that allows calculation of potential emissions based on 500 operating hours per year. [Minn. R. 7007.0800, subps. 4-5]
5.48.18	The Permittee shall follow the engine manufacturer's recommended operation and maintenance specifications for good combustion practices. The Permittee shall maintain records of all maintenance activities conducted on the engine showing that the engine manufacturer's specifications were met. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.48.19	Best Management Practices for Internal Combustion Engines (ICE) 1. The Permittee must only use diesel fuel with a sulfur content of less than or equal to 15 ppm in the emergency engines. 2. The Permittee may not install a rain cap on the emergency engine stack. 3. The Permittee must make the test runs for each engine as short as allowed by insurance and building code considerations. 4. The testing for an emergency engine shall not occur while another emergency engine is being tested. 5. No testing shall be conducted on a day the Air Quality Index (AQI) or the forecasted AQI (found on the MPCA website) exceeds 90, unless the test cannot be deferred. [Stage 1]. [Title I Condition: 40 CFR 52.21(k)(modeling) and Minn. R. 7007.3000]
5.48.20	Permittee must record the following information for each test of each engine: 1. The unit that was tested; 2. The date; 3. The time the test started; 4. The time the test was completed; and 5. The Air Quality Index (AQI) at the time the test began. If testing was conducted on a day with the AQI above 90, document the reason it was not possible to defer the test. [Stage 1]. [Title I Condition: 40 CFR 52.21(k)(modeling) and Minn. R. 7007.3000]
5.48.21	Performance Test: Upon the request of the Commissioner, the Permittee shall conduct a performance test for any or all of the following pollutants, including, but not limited to: PM, PM10, PM2.5, SO2, NOx, CO, VOC, and opacity. [Minn. R. 7017.2020, subp. 1]
5.48.22	EQUI 138 is a new affected source as defined under 40 CFR pt. 63, subp. ZZZZ, and the facility is a major source as defined at 40 CFR 63.2, and EQUI 138 is an emergency compression ignition RICE with a site rating of less than 500 brake HP. The Permittee shall meet the requirements of 40 CFR pt. 63, subp. ZZZZ by meeting the requirements of 40 CFR pt. 60, subp. IIII. No further requirements of 40 CFR pt. 63, subp. ZZZZ apply to EQUI 138. [40 CFR 63.6590(c), Minn. R. 7011.8150]

Requirement number	Requirement and citation
5.48.23	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. IIII as follows: 40 CFR 60.4200(a)(2)(ii); 40 CFR 60.4200(a)(4); 40 CFR 60.4205(c); 40 CFR 60.4206; 40 CFR 60.4207(b); 40 CFR 60.4209(a); 40 CFR 60.4211(a); 40 CFR 60.4211(c); 40 CFR 60.4211(f)(1); 40 CFR 60.4211(f)(2)(i); 40 CFR 60.4211(f)(3); 40 CFR 60.4214(b); 40 CFR 60.4218; 40 CFR 60.4219; 40 CFR pt. 60, subp. IIII, Table 3; 40 CFR pt. 60, subp. IIII, Table 4; 40 CFR pt. 60, subp. IIII, Table 5; and 40 CFR pt. 60, subp. IIII, Table 8. A copy of 40 CFR pt. 60, subp. IIII is included in Appendix M. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR 63.6590(c), 40 CFR pt. 60, subp. IIII, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2305, Minn. R. 7011.8150]
5.48.24	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(3) & (4); 40 CFR 60.7(b); 40 CFR 60.9; 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR 63.6590(c), 40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.8150, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 139	**Concentrator Emergency Power Generator**

Requirement number	Requirement and citation
5.49.1	Filterable Particulate Matter <= 0.15 grams per horsepower-hour. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.49.2	The Permittee must limit emissions of Particulate Matter <= 0.20 grams per kilowatt-hour as described in 40 CFR pt. 1039, Appendix I. [40 CFR 60.4202(b)(2), 40 CFR 60.4205(b), Minn. R. 7011.2305]
5.49.3	PM < 10 micron <= 0.15 grams per horsepower-hour. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.49.4	PM < 2.5 micron <= 0.15 grams per horsepower-hour. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.49.5	Carbon Monoxide <= 2.6 grams per horsepower-hour. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.49.6	The Permittee must limit emissions of Carbon Monoxide <= 3.5 grams per kilowatt-hour as described in 40 CFR pt. 1039, Appendix I. [40 CFR 60.4202(b)(2), 40 CFR 60.4205(b), Minn. R. 7011.2305]
5.49.7	NMHC+NOx <= 4.8 grams per horsepower-hour. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.49.8	The Permittee must limit emissions of NMHC+NOx <= 6.4 grams per kilowatt-hour as described in 40 CFR pt. 1039, Appendix I. [40 CFR 60.4202(b)(2), 40 CFR 60.4205(b), Minn. R. 7011.2305]
5.49.9	Sulfur Dioxide <= 0.0015 pounds per million Btu heat input. The potential to emit from the unit is 0.0015 lb/MMBtu due to equipment design and allowable fuels. [Minn. R. 7011.2300, subp. 2(B)]
5.49.10	Opacity <= 5 percent opacity 6-minute average once operating temperatures have been attained. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.49.11	The Permittee must limit emissions of Opacity <= 20 percent opacity during the acceleration mode. [40 CFR 60.4202(b)(2), 40 CFR 60.4205(b), Minn. R. 7011.2305]
5.49.12	The Permittee must limit emissions of Opacity <= 15 percent opacity during the lugging mode. [40 CFR 60.4202(b)(2), 40 CFR 60.4205(b), Minn. R. 7011.2305]
5.49.13	The Permittee must limit emissions of Opacity <= 50 percent opacity during the peaks in either the acceleration or lugging modes. [40 CFR 60.4202(b)(2), 40 CFR 60.4205(b), Minn. R. 7011.2305]
5.49.14	Opacity <= 20 percent opacity once operating temperatures have been attained. [Minn. R. 7011.2300, subp. 1]
5.49.15	Fuel type: The Permittee shall use only #1 diesel, #2 diesel, or #2 fuel oil. [Minn. R. 7005.0100, subp. 35a]
5.49.16	Sulfur Content of Fuel <= 0.0015 percent by weight. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.49.17	The Permittee must limit Sulfur Content of Fuel <= 15.0 parts per million and either a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume, as required by 40 CFR 1090.305. [40 CFR 60.4207(b), Minn. R. 7011.2305]
5.49.18	The Permittee shall keep records of fuel type and usage on a monthly basis. [Minn. R. 7007.0800, subp. 5]
5.49.19	Fuel Supplier Certification: The Permittee shall obtain and maintain a fuel supplier certification for each shipment of diesel fuel oil, certifying that the sulfur content does not exceed 0.0015 percent by weight. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.49.20	Hours of Operation: The Permittee shall maintain documentation on site that the unit is an emergency generator by design that qualifies under the U.S. EPA memorandum entitled "Calculating Potential to Emit (PTE) for Emergency Generators" dated September 6, 1995, that allows calculation of potential emissions based on 500 operating hours per year. [Minn. R. 7007.0800, subps. 4-5]
5.49.21	The Permittee shall follow the engine manufacturer's recommended operation and maintenance specifications for good combustion practices. The Permittee shall maintain records of all maintenance activities conducted on the engine showing that the engine manufacturer's specifications were met.

Requirement number	Requirement and citation
	[Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.49.22	Best Management Practices for Internal Combustion Engines (ICE) 1. The Permittee must only use diesel fuel with a sulfur content of less than or equal to 15 ppm in the emergency engines. 2. The Permittee may not install a rain cap on the emergency engine stack. 3. The Permittee must make the test runs for each engine as short as allowed by insurance and building code considerations. 4. The testing for an emergency engine shall not occur while another emergency engine is being tested. 5. No testing shall be conducted on a day the Air Quality Index (AQI) or the forecasted AQI (found on the MPCA website) exceeds 90, unless the test cannot be deferred. [Stage 1]. [Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.49.23	Permittee must record the following information for each test of each engine: 1. The unit that was tested; 2. The date; 3. The time the test started; 4. The time the test was completed; and 5. The Air Quality Index (AQI) at the time the test began. If testing was conducted on a day with the AQI above 90, document the reason it was not possible to defer the test. [Stage 1]. [Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.49.24	Performance Test: Upon the request of the Commissioner, the Permittee shall conduct a performance test for any or all of the following pollutants, including, but not limited to: PM, PM10, PM2.5, SO2, NOx, CO, VOC, and opacity. [Minn. R. 7017.2020, subp. 1]
5.49.25	At the time of permit issuance, EQUI 139 is considered a new affected source under 40 CFR pt. 63, subp. ZZZZ as defined at 40 CFR 63.6590(a)(2)(i). However, this unit meets the criteria in 40 CFR 63.6590(b)(1)(i) so no requirements of 40 CFR pt. 63, subps. A and ZZZZ, except the initial notification requirements of 40 CFR 63.6645(f), apply. [40 CFR 63.6590(a)(2)(i) and (b)(1)(i), Minn. R. 7011.8150]
5.49.26	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. IIII as follows: 40 CFR 60.4200(a)(2)(i); 40 CFR 60.4202(b)(2); 40 CFR 60.4205(b); 40 CFR 60.4206; 40 CFR 60.4207(b); 40 CFR 60.4208(a); 40 CFR 60.4209(a); 40 CFR 60.4211(a); 40 CFR 60.4211(c); 40 CFR 60.4211(f)(1); 40 CFR 60.4211(f)(2)(i); 40 CFR 60.4211(f)(3); 40 CFR 60.4214(b); 40 CFR 60.4214(d); 40 CFR 60.4214(g)-(j); 40 CFR 60.4218; 40 CFR 60.4219; and 40 CFR pt. 60, subp. IIII, Table 8. A copy of 40 CFR pt. 60, subp. IIII is included in Appendix M. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of

Requirement number	Requirement and citation
	promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. IIII, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2305]
5.49.27	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(3) & (4); 40 CFR 60.7(b); 40 CFR 60.9; 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix I. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 140	**Coarse Ore Storage Conveyor**
5.50.1	The Permittee must vent emissions from EQUI 140 to control equipment meeting the requirements of TREA 4 whenever EQUI 140 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.50.2	The Permittee must vent emissions from EQUI 140 to control equipment meeting the requirements of TREA 4 whenever EQUI 140 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.50.3	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.50.4	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.50.5	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of

Requirement number	Requirement and citation
	promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.50.6	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 141	**Fine Ore Storage Conveyor**
5.51.1	The Permittee must vent emissions from EQUI 141 to control equipment meeting the requirements of TREA 5 whenever EQUI 141 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) and Minn R. 7007.3000]
5.51.2	The Permittee must vent emissions from EQUI 141 to control equipment meeting the requirements of TREA 5 whenever EQUI 141 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.51.3	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.51.4	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.51.5	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b).

Requirement number	Requirement and citation
	A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.51.6	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 149	**Pellet Plant Emergency Power Generator**
5.52.1	Filterable Particulate Matter <= 0.15 grams per horsepower-hour. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.52.2	The Permittee must limit emissions of Particulate Matter <= 0.20 grams per kilowatt-hour as described in 40 CFR pt. 1039, Appendix I. [40 CFR 60.4202(b)(2), 40 CFR 60.4205(b), Minn. R. 7011.2305]
5.52.3	PM < 10 micron <= 0.15 grams per horsepower-hour. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.52.4	PM < 2.5 micron <= 0.15 grams per horsepower-hour. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.52.5	Carbon Monoxide <= 2.6 grams per horsepower-hour. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.52.6	The Permittee must limit emissions of Carbon Monoxide <= 3.5 grams per kilowatt-hour as described in 40 CFR pt. 1039, Appendix I. [40 CFR 60.4202(b)(2), 40 CFR 60.4205(b), Minn. R. 7011.2305]
5.52.7	NMHC+NOx <= 4.8 grams per horsepower-hour. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.52.8	The Permittee must limit emissions of NMHC+NOx <= 6.4 grams per kilowatt-hour as described in 40 CFR pt. 1039, Appendix I. [40 CFR 60.4202(b)(2), 40 CFR 60.4205(b), Minn. R. 7011.2305]
5.52.9	Sulfur Dioxide <= 0.0015 pounds per million Btu heat input. The potential to emit from the unit is 0.0015 lb/MMBtu due to equipment design and allowable fuels. [Minn. R. 7011.2300, subp. 2(B)]

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5.52.10	Opacity <= 5 percent opacity 6-minute average once operating temperatures have been attained. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.52.11	The Permittee must limit emissions of Opacity <= 20 percent opacity during the acceleration mode. [40 CFR 60.4202(b)(2), 40 CFR 60.4205(b), Minn. R. 7011.2305]
5.52.12	The Permittee must limit emissions of Opacity <= 15 percent opacity during the lugging mode. [40 CFR 60.4202(b)(2), 40 CFR 60.4205(b), Minn. R. 7011.2305]
5.52.13	The Permittee must limit emissions of Opacity <= 50 percent opacity during the peaks in either the acceleration or lugging modes. [40 CFR 60.4202(b)(2), 40 CFR 60.4205(b), Minn. R. 7011.2305]
5.52.14	Opacity <= 20 percent opacity once operating temperatures have been attained. [Minn. R. 7011.2300, subp. 1]
5.52.15	Fuel type: The Permittee shall use only #1 diesel, #2 diesel, or #2 fuel oil. [Minn. R. 7005.0100, subp. 35a]
5.52.16	Sulfur Content of Fuel <= 0.0015 percent by weight. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.52.17	The Permittee must limit Sulfur Content of Fuel <= 15.0 parts per million and either a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume, as required by 40 CFR 1090.305. [40 CFR 60.4207(b), Minn. R. 7011.2305]
5.52.18	The Permittee shall keep records of fuel type and usage on a monthly basis. [Minn. R. 7007.0800, subp. 5]
5.52.19	Fuel Supplier Certification: The Permittee shall obtain and maintain a fuel supplier certification for each shipment of diesel fuel oil, certifying that the sulfur content does not exceed 0.0015 percent by weight. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.52.20	Hours of Operation: The Permittee shall maintain documentation on site that the unit is an emergency generator by design that qualifies under the U.S. EPA memorandum entitled "Calculating Potential to Emit (PTE) for Emergency Generators" dated September 6, 1995, that allows calculation of potential emissions based on 500 operating hours per year. [Minn. R. 7007.0800, subps. 4-5]
5.52.21	The Permittee shall follow the engine manufacturer's recommended operation and maintenance specifications for good combustion practices. The Permittee shall maintain records of all maintenance activities conducted on the engine showing that the engine manufacturer's specifications were met. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.52.22	Best Management Practices for Internal Combustion Engines (ICE) 1. The Permittee must only use diesel fuel with a sulfur content of less than or equal to 15 ppm in the emergency engines. 2. The Permittee may not install a rain cap on the emergency engine stack. 3. The Permittee must make the test runs for each engine as short as allowed by insurance and building code considerations. 4. The testing for an emergency engine shall not occur while another emergency engine is being tested. 5. No testing shall be conducted on a day the Air Quality Index (AQI) or the forecasted AQI (found on the MPCA website) exceeds 90, unless the test cannot be deferred. [Stage 1]. [Title I Condition: 40 CFR 52.21(k)(modeling) and Minn. R. 7007.3000]
5.52.23	Permittee must record the following information for each test of each engine: 1. The unit that was tested; 2. The date; 3. The time the test started; 4. The time the test was completed; and 5. The Air Quality Index (AQI) at the time the test began. If testing was conducted on a day with the AQI above 90, document the reason it was not possible to defer the test. [Stage 1]. [Title I Condition: 40 CFR 52.21(k)(modeling) and Minn. R. 7007.3000]

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5.52.24	Performance Test: Upon the request of the Commissioner, the Permittee shall conduct a performance test for any or all of the following pollutants, including, but not limited to: PM, PM10, PM2.5, SO2, NOx, CO, VOC, and opacity. [Minn. R. 7017.2020, subp. 1]
5.52.25	At the time of permit issuance, EQUI 149 is considered a new affected source under 40 CFR pt. 63, subp. ZZZZ as defined at 40 CFR 63.6590(a)(2)(i). However, this unit meets the criteria in 40 CFR 63.6590(b)(1)(i) so no requirements of 40 CFR pt. 63, subps. A and ZZZZ, except the initial notification requirements of 40 CFR 63.6645(f), apply. [40 CFR 63.6590(a)(2)(i) and (b)(1)(i), Minn. R. 7011.8150]
5.52.26	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. IIII as follows: 40 CFR 60.4200(a)(2)(i); 40 CFR 60.4202(b)(2); 40 CFR 60.4205(b); 40 CFR 60.4206; 40 CFR 60.4207(b); 40 CFR 60.4208(a); 40 CFR 60.4209(a); 40 CFR 60.4211(a); 40 CFR 60.4211(c); 40 CFR 60.4211(f)(1); 40 CFR 60.4211(f)(2)(i); 40 CFR 60.4211(f)(3); 40 CFR 60.4214(b); 40 CFR 60.4214(d); 40 CFR 60.4214(g)-(j); 40 CFR 60.4218; 40 CFR 60.4219; and 40 CFR pt. 60, subp. IIII, Table 8. A copy of 40 CFR pt. 60, subp. IIII is included in Appendix M. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. IIII, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2305]
5.52.27	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(3) & (4); 40 CFR 60.7(b); 40 CFR 60.9; 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in

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	the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 191	**Limestone Bin**
5.53.1	The Permittee must vent emissions from EQUI 191 to control equipment meeting the requirements of TREA 136 whenever EQUI 191 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.53.2	The Permittee must vent emissions from EQUI 191 to control equipment meeting the requirements of TREA 136 whenever EQUI 191 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.53.3	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(a) and (f), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]
5.53.4	Limestone Concentration: Lead <= 2.3 milligrams per kilogram 12-month rolling average on a dry basis of limestone handled by this source. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.53.5	Lead: Supplier Certification: For each limestone shipment, the Permittee must obtain a certification from the supplier, stating the percent lead by weight in the limestone. If a lead content range is provided, the highest value in the range must be used in all compliance calculations. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.53.6	Lead: Recordkeeping: By the 28th of each month, the Permittee must identify and record the highest limestone lead concentration from the shipments received in the previous calendar month and must calculate the 12-month rolling average limestone lead concentration for the previous 12-month period. [Stage 1]. [Minn. R. 7007.0800, subp. 5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.53.7	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows: 40 CFR 60.670(a)(1); 40 CFR 60.670(d)(1)-(3); 40 CFR 60.670(e) & (f); 40 CFR 60.671; 40 CFR 60.672(a) & (f); 40 CFR 60.673(a) & (b); 40 CFR 60.674(c); 40 CFR 60.675(b) & (e); 40 CFR 60.675(b)(2); 40 CFR 60.675(c)(2)(i); 40 CFR 60.675(e)(2); 40 CFR 60.675(e)(2)(i)-(iii); 40 CFR 60.675(g); 40 CFR 60.676(a); 40 CFR 60.676(a)(4); 40 CFR 60.676(a)(4)(i) & (ii); 40 CFR 60.676(b)(1); 40 CFR 60.676(f), (h), (i), & (k); 40 CFR 60.676(i)(1); 40 CFR pt. 60, subp. OOO, Table 1, as specified elsewhere in this permit; and

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	40 CFR pt. 60, subp. OOO, Table 2 (after April 22, 2008; opacity limit only). A copy of 40 CFR pt. 60, subp. OOO is included in Appendix L. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]
5.53.8	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(b)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
5.53.9	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. A as follows: 40 CFR 63.1(a); 40 CFR 63.1(b)(1) & (b)(3); 40 CFR 63.1(c)(1) & (2); 40 CFR 63.2; 40 CFR 63.3; 40 CFR 63.4(a)-(c); 40 CFR 63.5(a), (b), & (d)-(f); 40 CFR 63.6(a)(1); 40 CFR 63.6(b)(1)-(5); 40 CFR 63.6(c)(1) & (2); 40 CFR 63.6(e)(1) & (3); 40 CFR 63.6(f) & (g); 40 CFR 63.6(i)(1)-(6), (8), (9), & (11); 40 CFR 63.6(j); 40 CFR 63.7(a)(2)-(4); 40 CFR 63.7(a)(2)(ix); 40 CFR 63.7(b)-(h);

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	40 CFR 63.9(b)(1), (2), (4), & (5); 40 CFR 63.9(c)-(e), & (h)-(j); 40 CFR 63.10(a)(5)-(7); 40 CFR 63.10(b)(1) & (3); 40 CFR 63.10(b)(2)(i)-(v), (ix), (xii), & (xiv); 40 CFR 63.10(d)(1), (2), (4), & (5); 40 CFR 63.10(f); 40 CFR 63.11(a); 40 CFR 63.12; 40 CFR 63.13; 40 CFR 63.14; and 40 CFR 63.15(a) & (b). A copy of 40 CFR pt. 63, subp. A is included in Appendix N. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(B), Minn. R. 7017.1010 & 7017.2015, subp. 3, Minn. R. 7019.0100]
EQUI 193	**Organic Binder Bin**
5.54.1	The Permittee must vent emissions from EQUI 193 to control equipment meeting the requirements of TREA 137 whenever EQUI 193 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.54.2	The Permittee must vent emissions from EQUI 193 to control equipment meeting the requirements of TREA 137 whenever EQUI 193 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.54.3	Particulate Matter <= 0.30 grains per dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. Because it has been shown that the facility does not cause a violation of ambient air quality standards, and is located outside the Mpls/St. Paul air quality control region and the city of Duluth, and is located at least 1/4 mile from any residence or public roadway, and the industrial process equipment is controlled by control equipment which has a collection efficiency of 85% by weight, this industrial process equipment is considered to be in compliance with this requirement. [Minn. R. 7011.0715, subps. 1(A) and 3]
5.54.4	Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)]
5.54.5	Organic Binder Concentration: Lead <= 2.3 milligrams per kilogram 12-month rolling average on a dry basis of organic binder handled by this source. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.54.6	Lead: Supplier Certification: For each organic binder shipment, the Permittee must obtain a certification from the supplier, stating the percent lead by weight in the organic binder. If a lead content range is provided, the highest value in the range must be used in all compliance calculations. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.54.7	Lead: Recordkeeping: By the 28th of each month, the Permittee must identify and record the highest organic binder lead concentration from the shipments received in the previous calendar month and

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	must calculate the 12-month rolling average organic binder lead concentration for the previous 12-month period. [Stage 1]. [Minn. R. 7007.0800, subp. 5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.54.8	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. A as follows: 40 CFR 63.1(a); 40 CFR 63.1(b)(1) & (b)(3); 40 CFR 63.1(c)(1) & (2); 40 CFR 63.2; 40 CFR 63.3; 40 CFR 63.4(a)-(c); 40 CFR 63.5(a), (b), & (d)-(f); 40 CFR 63.6(a)(1); 40 CFR 63.6(b)(1)-(5); 40 CFR 63.6(c)(1) & (2); 40 CFR 63.6(e)(1) & (3); 40 CFR 63.6(f) & (g); 40 CFR 63.6(i)(1)-(6), (8), (9), & (11); 40 CFR 63.6(j); 40 CFR 63.7(a)(2)-(4); 40 CFR 63.7(a)(2)(ix); 40 CFR 63.7(b)-(h); 40 CFR 63.9(b)(1), (2), (4), & (5); 40 CFR 63.9(c)-(e), & (h)-(j); 40 CFR 63.10(a)(5)-(7); 40 CFR 63.10(b)(1) & (3); 40 CFR 63.10(b)(2)(i)-(v), (ix), (xii), & (xiv); 40 CFR 63.10(d)(1), (2), (4), & (5); 40 CFR 63.10(f); 40 CFR 63.11(a); 40 CFR 63.12; 40 CFR 63.13; 40 CFR 63.14; and 40 CFR 63.15(a) & (b). A copy of 40 CFR pt. 63, subp. A is included in Appendix N. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(B), Minn. R. 7017.1010 & 7017.2015, subp. 3, Minn. R. 7019.0100]
EQUI 214	**Sodium Carbonate Bin**
5.55.1	The Permittee must vent emissions from EQUI 214 to control equipment meeting the requirements of TREA 137 whenever EQUI 214 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.55.2	The Permittee must vent emissions from EQUI 214 to control equipment meeting the requirements of TREA 137 whenever EQUI 214 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to

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	avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.55.3	The Permittee must limit Filterable Particulate Matter <= 0.032 grams per dry standard cubic meter 3-hour average (0.014 grains per dry standard cubic foot). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]
5.55.4	Sodium Carbonate Concentration: Lead <= 2.3 milligrams per kilogram 12-month rolling average on a dry basis of sodium carbonate handled by this source. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.55.5	Lead: Supplier Certification: For each sodium carbonate shipment, the Permittee must obtain a certification from the supplier, stating the percent lead by weight in the sodium carbonate. If a lead content range is provided, the highest value in the range must be used in all compliance calculations. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.55.6	Lead: Recordkeeping: By the 28th of each month, the Permittee must identify and record the highest sodium carbonate lead concentration from the shipments received in the previous calendar month and must calculate the 12-month rolling average sodium carbonate lead concentration for the previous 12-month period. [Stage 1]. [Minn. R. 7007.0800, subp. 5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.55.7	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows: 40 CFR 60.670(a)(1); 40 CFR 60.670(d)(1)-(3); 40 CFR 60.670(e) & (f); 40 CFR 60.671; 40 CFR 60.672(a); 40 CFR 60.673(a) & (b); 40 CFR 60.674(d); 40 CFR 60.675(a), (b), & (e); 40 CFR 60.675(b)(1); 40 CFR 60.675(e); 40 CFR 60.675(e)(2)-(4); 40 CFR 60.675(e)(2)(i)-(iii); 40 CFR 60.676(a); 40 CFR 60.676(a)(4); 40 CFR 60.676(a)(4)(i) & (ii); 40 CFR 60.676(b)(2); 40 CFR 60.676(f), (h), (i), & (k); 40 CFR 60.676(i)(1); 40 CFR pt. 60, subp. OOO, Table 1, as specified elsewhere in this permit; and 40 CFR pt. 60, subp. OOO, Table 2 (after April 22, 2008; PM limit only). A copy of 40 CFR pt. 60, subp. OOO is included in Appendix L. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]
5.55.8	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5;

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	40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(3) & (4); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a), (d), (f), & (g); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
5.55.9	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. A as follows: 40 CFR 63.1(a); 40 CFR 63.1(b)(1) & (b)(3); 40 CFR 63.1(c)(1) & (2); 40 CFR 63.2; 40 CFR 63.3; 40 CFR 63.4(a)-(c); 40 CFR 63.5(a), (b), & (d)-(f); 40 CFR 63.6(a)(1); 40 CFR 63.6(b)(1)-(5); 40 CFR 63.6(c)(1) & (2); 40 CFR 63.6(e)(1) & (3); 40 CFR 63.6(f) & (g); 40 CFR 63.6(i)(1)-(6), (8), (9), & (11); 40 CFR 63.6(j); 40 CFR 63.7(a)(2)-(4); 40 CFR 63.7(a)(2)(ix); 40 CFR 63.7(b)-(h); 40 CFR 63.9(b)(1), (2), (4), & (5); 40 CFR 63.9(c)-(e), & (h)-(j); 40 CFR 63.10(a)(5)-(7); 40 CFR 63.10(b)(1) & (3); 40 CFR 63.10(b)(2)(i)-(v), (ix), (xii), & (xiv); 40 CFR 63.10(d)(1), (2), (4), & (5); 40 CFR 63.10(f); 40 CFR 63.11(a); 40 CFR 63.12; 40 CFR 63.13; 40 CFR 63.14; and 40 CFR 63.15(a) & (b). A copy of 40 CFR pt. 63, subp. A is included in Appendix N. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of

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	promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(B), Minn. R. 7017.1010 & 7017.2015, subp. 3, Minn. R. 7019.0100]
EQUI 251	**Grizzly Transfer Tower**
5.56.1	The Permittee must vent emissions from EQUI 251 to control equipment meeting the requirements of TREA 47 whenever EQUI 251 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.56.2	The Permittee must vent emissions from EQUI 251 to control equipment meeting the requirements of TREA 47 whenever EQUI 251 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.56.3	Filterable Particulate Matter <= 0.052 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.56.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.56.5	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.56.6	PM < 10 micron <= 0.052 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.56.7	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.56.8	PM < 2.5 micron <= 0.052 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.56.9	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.56.10	Lead <= 6.2E-07 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent EQUI 251 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore lead concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent EQUI 251 performance test. This determination will be made for each EQUI 251 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.56.11	Fluorides <= 5.2E-08 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent EQUI 251 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore fluorides concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent EQUI 251 performance test. This determination will be made for each EQUI 251 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.56.12	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more

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	than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.56.13	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.56.14	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.56.15	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 252	**Cobber Rejects Transfer Tower**
5.57.1	The Permittee must vent emissions from EQUI 252 to control equipment meeting the requirements of TREA 43 whenever EQUI 252 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.57.2	The Permittee must vent emissions from EQUI 252 to control equipment meeting the requirements of TREA 43 whenever EQUI 252 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency

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	(EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.57.3	Filterable Particulate Matter <= 0.045 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.57.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.57.5	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.57.6	PM < 10 micron <= 0.045 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.57.7	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.57.8	PM < 2.5 micron <= 0.045 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.57.9	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.57.10	Lead <= 3.7E-07 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent EQUI 252 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average waste rock lead concentration value that occurred within the 12 calendar months preceding the most recent EQUI 252 performance test. This determination will be made for each EQUI 252 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.57.11	Waste Rock Concentration: Lead <= 8.4 milligrams per kilogram 12-month rolling average on a dry basis of waste rock handled by this source. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.57.12	Fluorides <= 3.1E-08 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent EQUI 252 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average waste rock fluorides concentration value that occurred within the 12 calendar months preceding the most recent EQUI 252 performance test. This determination will be made for each EQUI 252 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.57.13	Waste Rock Concentration: Fluorides <= 0.7 milligrams per kilogram 12-month rolling average on a dry basis of waste rock handled by this source. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.57.14	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.57.15	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.57.16	Lead: Sampling Methodology: For the first 12 consecutive months after the Initial Startup Date of ore crushing operations, the Permittee must sample and analyze the lead concentration of the waste rock on a dry basis using EPA Method 6010B on a weekly basis.

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	If after 12 consecutive months, each sample is less than the concentration limit or if the 95% UCL of all samples taken in the previous 12-month period is less than the concentration limit, the sampling frequency may be reduced to monthly. If thereafter, the 95% UCL of all samples taken in the previous 12-month period is greater than the limit, the Permittee must sample and analyze weekly until the 95% UCL of all samples taken in a continuous 12-month period is less than the limit. The Permittee may then reduce the sampling frequency to monthly. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.57.17	Lead: 95% Upper Confidence Level (UCL): The Permittee must use the following method for calculating the waste rock lead concentration 95% UCL: - For samples for which the lead concentration is less than the detection limit, the Permittee must assume a concentration of lead equal to the detection limit. - The Permittee must calculate the 95% UCL using the EPA ProUCL (Version 5.2 or higher) software or other electronic spreadsheet program, as illustrated in Appendix C. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.57.18	Lead: Recordkeeping: By the 28th of each month, the Permittee must calculate and record the waste rock lead concentration for the samples taken in the previous calendar month and must calculate the 12-month rolling average waste rock lead concentration for the previous 12-month period. [Stage 1]. [Minn. R. 7007.0800, subp. 5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.57.19	Fluorides: Sampling Methodology: For the first 12 consecutive months after the Initial Startup Date of ore crushing operations, the Permittee must sample and analyze the fluorides concentration of the waste rock on a dry basis using EPA Method 9056 on a weekly basis. If after 12 consecutive months, each sample is less than the concentration limit or if the 95% UCL of all samples taken in the previous 12-month period is less than the concentration limit, the sampling frequency may be reduced to monthly. If thereafter, the 95% UCL of all samples taken in the previous 12-month period is greater than the limit, the Permittee must sample and analyze weekly until the 95% UCL of all samples taken in a continuous 12-month period is less than the limit. The Permittee may then reduce the sampling frequency to monthly. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.57.20	Fluorides: 95% Upper Confidence Level (UCL): The Permittee must use the following method for calculating the waste rock fluorides concentration 95% UCL: - For samples for which the fluorides concentration is less than the detection limit, the Permittee shall assume a concentration of fluorides equal to the detection limit. - The Permittee must calculate the 95% UCL using the EPA ProUCL (Version 5.2 or higher) software or other electronic spreadsheet program, as illustrated in Appendix C. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.57.21	Fluorides: Recordkeeping: By the 28th of each month, the Permittee must calculate and record the waste rock fluorides concentration for the samples taken in the previous calendar month and must calculate the 12-month rolling average waste rock fluorides concentration for the previous 12-month period. [Stage 1]. [Minn. R. 7007.0800, subp. 5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.57.22	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b).

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	A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.57.23	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 253	**Secondary Crusher Line 1**
5.58.1	The Permittee must vent emissions from EQUI 253 to control equipment meeting the requirements of TREA 42 whenever EQUI 253 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.58.2	The Permittee must vent emissions from EQUI 253 to control equipment meeting the requirements of TREA 42 whenever EQUI 253 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.58.3	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.58.4	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.58.5	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2);

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	40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.58.6	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 254	**Secondary Crusher Line 2**
5.59.1	The Permittee must vent emissions from EQUI 254 to control equipment meeting the requirements of TREA 44 whenever EQUI 254 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.59.2	The Permittee must vent emissions from EQUI 254 to control equipment meeting the requirements of TREA 44 whenever EQUI 254 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.59.3	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.59.4	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.59.5	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows:

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	40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.59.6	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 255	**Secondary Crusher Line 3**
5.60.1	The Permittee must vent emissions from EQUI 255 to control equipment meeting the requirements of TREA 45 whenever EQUI 255 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.60.2	The Permittee must vent emissions from EQUI 255 to control equipment meeting the requirements of TREA 45 whenever EQUI 255 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.60.3	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]

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5.60.4	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.60.5	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.60.6	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 256	**Secondary Crusher Line 4**
5.61.1	The Permittee must vent emissions from EQUI 256 to control equipment meeting the requirements of TREA 46 whenever EQUI 256 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.61.2	The Permittee must vent emissions from EQUI 256 to control equipment meeting the requirements of TREA 46 whenever EQUI 256 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to

Requirement number	Requirement and citation
	avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.61.3	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.61.4	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.61.5	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.61.6	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 257	**Indurating Furnace Hood Exhaust**
5.62.1	The Permittee must vent emissions from EQUI 257 to control equipment meeting the requirements of TREA 13 whenever EQUI 257 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.62.2	Filterable Particulate Matter <= 0.0040 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.62.3	PM < 10 micron <= 0.0080 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I

Requirement number	Requirement and citation
	Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.62.4	PM < 2.5 micron <= 0.0080 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.62.5	Carbon Monoxide <= 2.4 parts per million 1-hour average. This limit is measured on a ppmv wet @ 15% oxygen basis. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.62.6	Sulfur Dioxide <= 8.6 parts per million 1-hour average. This limit is measured on a ppmv wet @ 15% oxygen basis. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.62.7	Volatile Organic Compounds <= 0.7 parts per million 3-hour rolling average. This limit is measure on a ppmv wet @ 15% oxygen basis. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.62.8	Lead <= 3.0E-6 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.62.9	Fluorides <= 2.4 parts per million 3-hour average. This limit is measured on a ppmv wet @ 15% oxygen basis. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.62.10	Sulfuric Acid Mist <= 0.051 parts per million 3-hour rolling average. This limit is measured on a ppmv wet @ 15% oxygen basis. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.62.11	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.62.12	Carbon Monoxide: Emissions Monitoring: The Permittee shall use a CEMS as specified in EQUI 20 to measure emissions. [Stage 1]. [Minn. R. 7017.1006, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.62.13	Nitrogen Oxides: Emissions Monitoring: The Permittee shall use a CEMS as specified in EQUI 43 to measure emissions. [Stage 1]. [Minn. R. 7017.1006, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.62.14	Sulfur Dioxide: Emissions Monitoring: The Permittee shall use a CEMS as specified in EQUI 21 to measure emissions. [Stage 1]. [Minn. R. 7017.1006, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.62.15	Sulfuric Acid Mist: The Permittee shall use the results from the SO2 CEMS (EQUI 21) and the equations in Appendix F to determine sulfuric acid mist emissions. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.62.16	Mercury: Emissions Monitoring: The Permittee shall use a CEMS as specified in EQUI 407 to measure emissions. This is a state-only requirement and is not enforceable by the EPA Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D)]
5.62.17	Oxygen: Emissions Monitoring: The Permittee shall use a CEMS as specified in EQUI 41 to measure emissions. [Stage 1]. [Minn. R. 7017.1006, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.62.18	Flow: The Permittee shall install and operate a flue gas flow monitor to measure gas flow rate to be used to convert concentration measurements to mass. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Minn. R. 7017.1006, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
EQUI 258	**Indurating Furnace Waste Gas**
5.63.1	The Permittee must vent emissions from EQUI 258 to control equipment meeting the requirements of TREA 14, TREA 15, TREA 49, TREA 173, TREA 174, and TREA 176 whenever EQUI 258 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]

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5.63.2	The Permittee must vent emissions from EQUI 258 to control equipment meeting the requirements of TREA 159 and TREA 175 whenever EQUI 258 operates. This is a state-only requirement and is not enforceable by the EPA Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 14]
5.63.3	Filterable Particulate Matter <= 0.0040 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.63.4	PM < 10 micron <= 0.0080 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.63.5	PM < 2.5 micron <= 0.0080 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.63.6	Carbon Monoxide <= 7.4 parts per million 1-hour average. This limit is measured on a ppmv wet @ 15% oxygen basis. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.63.7	Sulfur Dioxide <= 5.0 parts per million 1-hour average. This limit is measured on a ppmv wet @ 15% oxygen basis. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.63.8	Volatile Organic Compounds <= 2.3 parts per million 3-hour rolling average. This limit is measure on a ppmv wet @ 15% oxygen basis. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.63.9	Lead <= 3.0E-6 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.63.10	Fluorides <= 2.4 parts per million 3-hour average. This limit is measured on a ppmv wet @ 15% oxygen basis. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.63.11	Sulfuric Acid Mist <= 0.030 parts per million 3-hour rolling average. This limit is measured on a ppmv wet @ 15% oxygen basis. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.63.12	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.63.13	Carbon Monoxide: Emissions Monitoring: The Permittee shall use a CEMS as specified in EQUI 24 to measure emissions. [Stage 1]. [Minn. R. 7017.1006, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.63.14	Nitrogen Oxides: Emissions Monitoring: The Permittee shall use a CEMS as specified in EQUI 49 to measure emissions. [Stage 1]. [Minn. R. 7017.1006, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.63.15	Sulfur Dioxide: Emissions Monitoring: The Permittee shall maintain and operate a CEMS as specified in EQUI 25 that continuously indicates and records the SO2 emissions. The recording device shall also calculate the one-hour average SO2 emission rate. [Stage 1]. [40 CFR 64.3(b)(4)(ii), Minn. R. 7017.0200, Minn. R. 7017.1006, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.63.16	Sulfur Dioxide: Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording SO2 emissions as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when EQUI 258 is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.63.17	Sulfuric Acid Mist: The Permittee shall use the results from the SO2 CEMS (EQUI 25) and the equations in Appendix F to determine sulfuric acid mist emissions. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.63.18	Mercury: Emissions Monitoring: The Permittee shall use a CEMS as specified in EQUI 408 to measure emissions.

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	This is a state-only requirement and is not enforceable by the EPA Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D)]
5.63.19	Oxygen: Emissions Monitoring: The Permittee shall use a CEMS as specified in EQUI 47 to measure emissions. [Stage 1]. [Minn. R. 7017.1006, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.63.20	Flow: The Permittee shall install and operate a flue gas flow monitor to measure gas flow rate to be used to convert concentration measurements to mass. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Minn. R. 7017.1006, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.63.21	Sulfur Dioxide: Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing operating conditions, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.63.22	Sulfur Dioxide: The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.63.23	Sulfur Dioxide: As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
EQUI 259	**Hearth Layer Separation**
5.64.1	The Permittee must vent emissions from EQUI 259 to control equipment meeting the requirements of TREA 17 whenever EQUI 259 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.64.2	The Permittee must vent emissions from EQUI 259 to control equipment meeting the requirements of TREA 17 whenever EQUI 259 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.64.3	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.64.4	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.64.5	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b).

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	A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.64.6	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 261	**Space Heaters**
5.65.1	Filterable Particulate Matter <= 0.40 pounds per million Btu heat input. The potential to emit from the unit is 0.0075 lb/MMBtu due to equipment design and allowable fuels. [Minn. R. 7011.0515, subp. 1]
5.65.2	Opacity <= 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. [Minn. R. 7011.0515, subp. 2]
5.65.3	The Permittee must install low NOx burners on all space heaters. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.65.4	Fuel type: Natural gas only, by design. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.65.5	The Permittee shall keep records of fuel purchases showing fuel types and usage on a monthly basis.[Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.65.6	The Permittee shall follow the equipment manufacturer's recommended operation and maintenance specifications for good combustion practices. The Permittee shall maintain records of all maintenance activities conducted on the equipment showing that the manufacturer's specifications were met. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
EQUI 262	**Ore Dumping to Crusher**
5.66.1	The Permittee must vent emissions from EQUI 262 to control equipment meeting the requirements of TREA 120 whenever EQUI 262 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R.

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	7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.66.2	The Permittee must vent emissions from EQUI 262 to control equipment meeting the requirements of TREA 120 whenever EQUI 262 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.66.3	Filterable Particulate Matter <= 0.80 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.66.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.66.5	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.66.6	PM < 10 micron <= 0.80 pounds per hour 3-hour average [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.66.7	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.66.8	PM < 2.5 micron <= 0.80 pounds per hour 3-hour average [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.66.9	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.66.10	Lead <= 9.6E-06 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent EQUI 262 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore lead concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent EQUI 262 performance test. This determination will be made for each EQUI 262 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.66.11	Fluorides <= 8.0E-07 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent EQUI 262 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore fluorides concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent EQUI 262 performance test. This determination will be made for each EQUI 262 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.66.12	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.66.13	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.66.14	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381;

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	40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.66.15	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 263	**Coarse Ore Barn Pile Drop**
5.67.1	The Permittee must vent emissions from EQUI 263 to control equipment meeting the requirements of TREA 4 whenever EQUI 263 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.67.2	The Permittee must vent emissions from EQUI 263 to control equipment meeting the requirements of TREA 4 whenever EQUI 263 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.67.3	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.67.4	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.67.5	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows:

Requirement number	Requirement and citation
	40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.67.6	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 264	**Fine Ore Barn Pile Drop**
5.68.1	The Permittee must vent emissions from EQUI 264 to control equipment meeting the requirements of TREA 5 whenever EQUI 264 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.68.2	The Permittee must vent emissions from EQUI 264 to control equipment meeting the requirements of TREA 5 whenever EQUI 264 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.68.3	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter

Requirement number	Requirement and citation
	(0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.68.4	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.68.5	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.68.6	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 266	**Pellet Plant Fire Water Supply Pump**
5.69.1	Filterable Particulate Matter <= 0.15 grams per horsepower-hour. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.69.2	The Permittee must limit Particulate Matter <= 0.15 grams per horsepower-hour. [40 CFR 60.4205(c), 40 CFR 63.6590(c), 40 CFR pt. 60, subp. IIII(Table 4), Minn. R. 7011.2305, Minn. R. 7011.8150]
5.69.3	PM < 10 micron <= 0.15 grams per horsepower-hour. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.69.4	PM < 2.5 micron <= 0.15 grams per horsepower-hour. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]

Requirement number	Requirement and citation
5.69.5	Carbon Monoxide <= 2.6 grams per horsepower-hour. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.69.6	The Permittee must limit Carbon Monoxide <= 2.6 grams per horsepower-hour. [40 CFR 60.4205(c), 40 CFR 63.6590(c), 40 CFR pt. 60, subp. IIII(Table 4), Minn. R. 7011.2305, Minn. R. 7011.8150]
5.69.7	NMHC+NOx <= 3.0 grams per horsepower-hour. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.69.8	The Permittee must limit NMHC+NOx <= 3.0 grams per horsepower-hour. [40 CFR 60.4205(c), 40 CFR 63.6590(c), 40 CFR pt. 60, subp. IIII(Table 4), Minn. R. 7011.2305, Minn. R. 7011.8150]
5.69.9	Sulfur Dioxide <= 0.0015 pounds per million Btu heat input. The potential to emit from the unit is 0.0015 lb/MMBtu due to equipment design and allowable fuels. [Minn. R. 7011.2300, subp. 2(B)]
5.69.10	Opacity <= 5 percent opacity 6-minute average once operating temperatures have been attained. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.69.11	Opacity <= 20 percent opacity once operating temperatures have been attained. [Minn. R. 7011.2300, subp. 1]
5.69.12	Fuel type: The Permittee shall use only #1 diesel, #2 diesel, or #2 fuel oil. [Minn. R. 7005.0100, subp. 35a]
5.69.13	Sulfur Content of Fuel <= 0.0015 percent by weight. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.69.14	The Permittee must limit Sulfur Content of Fuel <= 15 parts per million and either a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume, as required by 40 CFR 1090.305. [40 CFR 60.4207(b), 40 CFR 63.6590(c), Minn. R. 7011.2305, Minn. R. 7011.8150]
5.69.15	The Permittee shall keep records of fuel type and usage on a monthly basis. [Minn. R. 7007.0800, subp. 5]
5.69.16	Fuel Supplier Certification: The Permittee shall obtain and maintain a fuel supplier certification for each shipment of diesel fuel oil, certifying that the sulfur content does not exceed 0.0015 percent by weight. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.69.17	Hours of Operation: The Permittee shall maintain documentation on site that the unit is an emergency generator by design that qualifies under the U.S. EPA memorandum entitled "Calculating Potential to Emit (PTE) for Emergency Generators" dated September 6, 1995, that allows calculation of potential emissions based on 500 operating hours per year. [Minn. R. 7007.0800, subps. 4-5]
5.69.18	The Permittee shall follow the engine manufacturer's recommended operation and maintenance specifications for good combustion practices. The Permittee shall maintain records of all maintenance activities conducted on the engine showing that the engine manufacturer's specifications were met. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.69.19	Best Management Practices for Internal Combustion Engines (ICE) 1. The Permittee must only use diesel fuel with a sulfur content of less than or equal to 15 ppm in the emergency engines. 2. The Permittee may not install a rain cap on the emergency engine stack. 3. The Permittee must make the test runs for each engine as short as allowed by insurance and building code considerations. 4. The testing for an emergency engine shall not occur while another emergency engine is being tested. 5. No testing shall be conducted on a day the Air Quality Index (AQI) or the forecasted AQI (found on the MPCA website) exceeds 90, unless the test cannot be deferred. [Stage 1]. [Title I Condition: 40 CFR 52.21(k)(modeling) and Minn. R. 7007.3000]
5.69.20	Permittee must record the following information for each test of each engine: 1. The unit that was tested; 2. The date; 3. The time the test started;

Requirement number	Requirement and citation
	4. The time the test was completed; and 5. The Air Quality Index (AQI) at the time the test began. If testing was conducted on a day with the AQI above 90, document the reason it was not possible to defer the test. [Stage 1]. [Title I Condition: 40 CFR 52.21(k)(modeling) and Minn. R. 7007.3000]
5.69.21	Performance Test: Upon the request of the Commissioner, the Permittee shall conduct a performance test for any or all of the following pollutants, including, but not limited to: PM, PM10, PM2.5, SO2, NOx, CO, VOC, and opacity. [Minn. R. 7017.2020, subp. 1]
5.69.22	EQUI 266 is a new affected source as defined under 40 CFR pt. 63, subp. ZZZZ, and the facility is a major source as defined at 40 CFR 63.2, and EQUI 266 is an emergency compression ignition RICE with a site rating of less than 500 brake HP. The Permittee shall meet the requirements of 40 CFR pt. 63, subp. ZZZZ by meeting the requirements of 40 CFR pt. 60, subp. IIII. No further requirements of 40 CFR pt. 63, subp. ZZZZ apply to EQUI 266. [40 CFR 63.6590(c), Minn. R. 7011.8150]
5.69.23	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. IIII as follows: 40 CFR 60.4200(a)(2)(ii); 40 CFR 60.4200(a)(4); 40 CFR 60.4205(c); 40 CFR 60.4206; 40 CFR 60.4207(b); 40 CFR 60.4209(a); 40 CFR 60.4211(a); 40 CFR 60.4211(c); 40 CFR 60.4211(f)(1); 40 CFR 60.4211(f)(2)(i); 40 CFR 60.4211(f)(3); 40 CFR 60.4214(b); 40 CFR 60.4218; 40 CFR 60.4219; 40 CFR pt. 60, subp. IIII, Table 3; 40 CFR pt. 60, subp. IIII, Table 4; 40 CFR pt. 60, subp. IIII, Table 5; and 40 CFR pt. 60, subp. IIII, Table 8. A copy of 40 CFR pt. 60, subp. IIII is included in Appendix M. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR 63.6590(c), 40 CFR pt. 60, subp. IIII, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2305, Minn. R. 7011.8150]
5.69.24	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(3) & (4); 40 CFR 60.7(b); 40 CFR 60.9; 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g);

Requirement number	Requirement and citation
	40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR 63.6590(c), 40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.8150, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 281	**Residual Silo**
5.70.1	The Permittee must vent emissions from EQUI 281 to control equipment meeting the requirements of TREA 146 whenever EQUI 281 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.70.2	The Permittee must vent emissions from EQUI 281 to control equipment meeting the requirements of TREA 146 whenever EQUI 281 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.70.3	Filterable Particulate Matter <= 0.013 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.70.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.70.5	Particulate Matter <= 0.30 grains per dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. Because it has been shown that the facility does not cause a violation of ambient air quality standards, and is located outside the Mpls/St. Paul air quality control region and the city of Duluth, and is located at least 1/4 mile from any residence or public roadway, and the industrial process equipment is controlled by control equipment which has a collection efficiency of 85% by weight, this industrial process equipment is considered to be in compliance with this requirement. [Minn. R. 7011.0715, subps. 1(A) and 3]
5.70.6	PM < 10 micron <= 0.013 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.70.7	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.70.8	PM < 2.5 micron <= 0.013 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.70.9	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.70.10	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]

Requirement number	Requirement and citation
5.70.11	Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)]
EQUI 282	**Dolomite Bin**
5.71.1	The Permittee must vent emissions from EQUI 282 to control equipment meeting the requirements of TREA 143 whenever EQUI 282 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.71.2	The Permittee must vent emissions from EQUI 282 to control equipment meeting the requirements of TREA 143 whenever EQUI 282 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.71.3	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(a) and (f), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]
5.71.4	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows: 40 CFR 60.670(a)(1); 40 CFR 60.670(d)(1)-(3); 40 CFR 60.670(e) & (f); 40 CFR 60.671; 40 CFR 60.672(a) & (f); 40 CFR 60.673(a) & (b); 40 CFR 60.674(c); 40 CFR 60.675(b) & (e); 40 CFR 60.675(b)(2); 40 CFR 60.675(c)(2)(i); 40 CFR 60.675(e)(2); 40 CFR 60.675(e)(2)(i)-(iii); 40 CFR 60.675(g); 40 CFR 60.676(a); 40 CFR 60.676(a)(4); 40 CFR 60.676(a)(4)(i) & (ii); 40 CFR 60.676(b)(1); 40 CFR 60.676(f), (h), (i), & (k); 40 CFR 60.676(i)(1); 40 CFR pt. 60, subp. OOO, Table 1, as specified elsewhere in this permit; and 40 CFR pt. 60, subp. OOO, Table 2 (after April 22, 2008; opacity limit only). A copy of 40 CFR pt. 60, subp. OOO is included in Appendix L. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]
5.71.5	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b);

Requirement number	Requirement and citation
	40 CFR 60.7(a)(3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(b)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 283	**Bentonite Bin**
5.72.1	The Permittee must vent emissions from EQUI 283 to control equipment meeting the requirements of TREA 144 whenever EQUI 283 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.72.2	The Permittee must vent emissions from EQUI 283 to control equipment meeting the requirements of TREA 144 whenever EQUI 283 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.72.3	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(a) and (f), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]
5.72.4	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows: 40 CFR 60.670(a)(1); 40 CFR 60.670(d)(1)-(3); 40 CFR 60.670(e) & (f); 40 CFR 60.671; 40 CFR 60.672(a) & (f); 40 CFR 60.673(a) & (b); 40 CFR 60.674(c); 40 CFR 60.675(b) & (e); 40 CFR 60.675(b)(2); 40 CFR 60.675(c)(2)(i); 40 CFR 60.675(e)(2); 40 CFR 60.675(e)(2)(i)-(iii); 40 CFR 60.675(g); 40 CFR 60.676(a); 40 CFR 60.676(a)(4); 40 CFR 60.676(a)(4)(i) & (ii); 40 CFR 60.676(b)(1); 40 CFR 60.676(f), (h), (i), & (k);

Requirement number	Requirement and citation
	40 CFR 60.676(i)(1); 40 CFR pt. 60, subp. OOO, Table 1, as specified elsewhere in this permit; and 40 CFR pt. 60, subp. OOO, Table 2 (after April 22, 2008; opacity limit only). A copy of 40 CFR pt. 60, subp. OOO is included in Appendix L. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]
5.72.5	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(b)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 284	**Storage Bin 1**
5.73.1	The Permittee must vent emissions from EQUI 284 to control equipment meeting the requirements of TREA 145 whenever EQUI 284 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.73.2	The Permittee must vent emissions from EQUI 284 to control equipment meeting the requirements of TREA 145 whenever EQUI 284 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.73.3	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(a) and (f), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]
5.73.4	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows: 40 CFR 60.670(a)(1);

Requirement number	Requirement and citation
	40 CFR 60.670(d)(1)-(3); 40 CFR 60.670(e) & (f); 40 CFR 60.671; 40 CFR 60.672(a) & (f); 40 CFR 60.673(a) & (b); 40 CFR 60.674(c); 40 CFR 60.675(b) & (e); 40 CFR 60.675(b)(2); 40 CFR 60.675(c)(2)(i); 40 CFR 60.675(e)(2); 40 CFR 60.675(e)(2)(i)-(iii); 40 CFR 60.675(g); 40 CFR 60.676(a); 40 CFR 60.676(a)(4); 40 CFR 60.676(a)(4)(i) & (ii); 40 CFR 60.676(b)(1); 40 CFR 60.676(f), (h), (i), & (k); 40 CFR 60.676(i)(1); 40 CFR pt. 60, subp. OOO, Table 1, as specified elsewhere in this permit; and 40 CFR pt. 60, subp. OOO, Table 2 (after April 22, 2008; opacity limit only). A copy of 40 CFR pt. 60, subp. OOO is included in Appendix L. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]
5.73.5	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(b)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]

Requirement number	Requirement and citation
EQUI 285	**Storage Bin 2**
5.74.1	The Permittee must vent emissions from EQUI 285 to control equipment meeting the requirements of TREA 147 whenever EQUI 285 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.74.2	The Permittee must vent emissions from EQUI 285 to control equipment meeting the requirements of TREA 147 whenever EQUI 285 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.74.3	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(a) and (f), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]
5.74.4	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows: 40 CFR 60.670(a)(1); 40 CFR 60.670(d)(1)-(3); 40 CFR 60.670(e) & (f); 40 CFR 60.671; 40 CFR 60.672(a) & (f); 40 CFR 60.673(a) & (b); 40 CFR 60.674(c); 40 CFR 60.675(b) & (e); 40 CFR 60.675(b)(2); 40 CFR 60.675(c)(2)(i); 40 CFR 60.675(e)(2); 40 CFR 60.675(e)(2)(i)-(iii); 40 CFR 60.675(g); 40 CFR 60.676(a); 40 CFR 60.676(a)(4); 40 CFR 60.676(a)(4)(i) & (ii); 40 CFR 60.676(b)(1); 40 CFR 60.676(f), (h), (i), & (k); 40 CFR 60.676(i)(1); 40 CFR pt. 60, subp. OOO, Table 1, as specified elsewhere in this permit; and 40 CFR pt. 60, subp. OOO, Table 2 (after April 22, 2008; opacity limit only). A copy of 40 CFR pt. 60, subp. OOO is included in Appendix L. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]
5.74.5	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(3), (4), & (6);

Requirement number	Requirement and citation
	40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(b)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 286	**Product Junction House 2**
5.75.1	The Permittee must vent emissions from EQUI 286 to control equipment meeting the requirements of TREA 140 whenever EQUI 286 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.75.2	The Permittee must vent emissions from EQUI 286 to control equipment meeting the requirements of TREA 140 whenever EQUI 286 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.75.3	Filterable Particulate Matter <= 0.052 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.75.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.75.5	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.75.6	PM < 10 micron <= 0.052 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.75.7	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.75.8	PM < 2.5 micron <= 0.052 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.75.9	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.75.10	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.75.11	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]

Requirement number	Requirement and citation
5.75.12	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.75.13	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 287	**Product Junction House 3**
5.76.1	The Permittee must vent emissions from EQUI 287 to control equipment meeting the requirements of TREA 141 whenever EQUI 287 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.76.2	The Permittee must vent emissions from EQUI 287 to control equipment meeting the requirements of TREA 141 whenever EQUI 287 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]

Requirement number	Requirement and citation
5.76.3	Filterable Particulate Matter <= 0.052 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.76.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.76.5	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.76.6	PM < 10 micron <= 0.052 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.76.7	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.76.8	PM < 2.5 micron <= 0.052 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.76.9	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.76.10	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.76.11	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.76.12	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.76.13	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12;

Requirement number	Requirement and citation
	40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 288	**Bentonite Receiving Bin 3**
5.77.1	The Permittee must vent emissions from EQUI 288 to control equipment meeting the requirements of TREA 142 whenever EQUI 288 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.77.2	The Permittee must vent emissions from EQUI 288 to control equipment meeting the requirements of TREA 142 whenever EQUI 288 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.77.3	Filterable Particulate Matter <= 0.12 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.77.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.77.5	PM < 10 micron <= 0.12 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.77.6	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.77.7	PM < 2.5 micron <= 0.12 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.77.8	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.77.9	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.77.10	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(a) and (f), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]
5.77.11	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows: 40 CFR 60.670(a)(1); 40 CFR 60.670(d)(1)-(3); 40 CFR 60.670(e) & (f); 40 CFR 60.671; 40 CFR 60.672(a) & (f); 40 CFR 60.673(a) & (b);

Requirement number	Requirement and citation
	40 CFR 60.674(c); 40 CFR 60.675(b) & (e); 40 CFR 60.675(b)(2); 40 CFR 60.675(c)(2)(i); 40 CFR 60.675(e)(2); 40 CFR 60.675(e)(2)(i)-(iii); 40 CFR 60.675(g); 40 CFR 60.676(a); 40 CFR 60.676(a)(4); 40 CFR 60.676(a)(4)(i) & (ii); 40 CFR 60.676(b)(1); 40 CFR 60.676(f), (h), (i), & (k); 40 CFR 60.676(i)(1); 40 CFR pt. 60, subp. OOO, Table 1, as specified elsewhere in this permit; and 40 CFR pt. 60, subp. OOO, Table 2 (after April 22, 2008; opacity limit only). A copy of 40 CFR pt. 60, subp. OOO is included in Appendix L. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]
5.77.12	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(b)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 289	**Primary Crusher Building Belt Conveyor**
5.78.1	The Permittee must vent emissions from EQUI 289 to control equipment meeting the requirements of TREA 150 whenever EQUI 289 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]

Requirement number	Requirement and citation
5.78.2	The Permittee must vent emissions from EQUI 289 to control equipment meeting the requirements of TREA 150 whenever EQUI 289 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.78.3	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.78.4	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.78.5	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.78.6	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 290	**Pneumatic Transport Vent 1**
5.79.1	The Permittee must vent emissions from EQUI 290 to control equipment meeting the requirements of

Requirement number	Requirement and citation
	TREA 151 whenever EQUI 290 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.79.2	The Permittee must vent emissions from EQUI 290 to control equipment meeting the requirements of TREA 151 whenever EQUI 290 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.79.3	Filterable Particulate Matter <= 0.010 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.79.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.79.5	The Permittee must limit Filterable Particulate Matter <= 0.032 grams per dry standard cubic meter 3-hour average (0.014 grains per dry standard cubic foot). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]
5.79.6	PM < 10 micron <= 0.010 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.79.7	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.79.8	PM < 2.5 micron <= 0.010 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.79.9	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.79.10	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.79.11	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows: 40 CFR 60.670(a)(1); 40 CFR 60.670(d)(1)-(3); 40 CFR 60.670(e) & (f); 40 CFR 60.671; 40 CFR 60.672(a); 40 CFR 60.673(a) & (b); 40 CFR 60.674(c); 40 CFR 60.675(a), (b), & (e); 40 CFR 60.675(b)(1); 40 CFR 60.675(e); 40 CFR 60.675(e)(2)-(4); 40 CFR 60.675(e)(2)(i)-(iii); 40 CFR 60.676(a); 40 CFR 60.676(a)(1); 40 CFR 60.676(a)(1)(i) & (ii); 40 CFR 60.676(b)(1); 40 CFR 60.676(f), (h), (i), & (k); 40 CFR 60.676(i)(1);

Requirement number	Requirement and citation
	40 CFR pt. 60, subp. OOO, Table 1, as specified elsewhere in this permit; and 40 CFR pt. 60, subp. OOO, Table 2 (after April 22, 2008; PM limit only). A copy of 40 CFR pt. 60, subp. OOO is included in Appendix L. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]
5.79.12	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(3) & (4); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a), (d), (f), & (g); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 291	**Pneumatic Transport Vent 2**
5.80.1	The Permittee must vent emissions from EQUI 291 to control equipment meeting the requirements of TREA 152 whenever EQUI 291 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.80.2	The Permittee must vent emissions from EQUI 291 to control equipment meeting the requirements of TREA 152 whenever EQUI 291 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.80.3	Filterable Particulate Matter <= 0.013 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.80.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.80.5	The Permittee must limit Filterable Particulate Matter <= 0.032 grams per dry standard cubic meter 3-hour average (0.014 grains per dry standard cubic foot). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]

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5.80.6	PM < 10 micron <= 0.013 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.80.7	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.80.8	PM < 2.5 micron <= 0.013 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.80.9	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.80.10	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.80.11	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows: 40 CFR 60.670(a)(1); 40 CFR 60.670(d)(1)-(3); 40 CFR 60.670(e) & (f); 40 CFR 60.671; 40 CFR 60.672(a); 40 CFR 60.673(a) & (b); 40 CFR 60.674(c); 40 CFR 60.675(a), (b), & (e); 40 CFR 60.675(b)(1); 40 CFR 60.675(e); 40 CFR 60.675(e)(2)-(4); 40 CFR 60.675(e)(2)(i)-(iii); 40 CFR 60.676(a); 40 CFR 60.676(a)(1); 40 CFR 60.676(a)(1)(i) & (ii); 40 CFR 60.676(b)(1); 40 CFR 60.676(f), (h), (i), & (k); 40 CFR 60.676(i)(1); 40 CFR pt. 60, subp. OOO, Table 1, as specified elsewhere in this permit; and 40 CFR pt. 60, subp. OOO, Table 2 (after April 22, 2008; PM limit only). A copy of 40 CFR pt. 60, subp. OOO is included in Appendix L. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]
5.80.12	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(3) & (4);

Requirement number	Requirement and citation
	40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a), (d), (f), & (g); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 293	**Rotary Rail Car Dumper**
5.81.1	The Permittee must vent emissions from EQUI 293 to control equipment meeting the requirements of TREA 122 whenever EQUI 293 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.81.2	The Permittee must vent emissions from EQUI 293 to control equipment meeting the requirements of TREA 122 whenever EQUI 293 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.81.3	The Permittee must close all rail access doors whenever EQUI 293 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.81.4	Filterable Particulate Matter <= 0.67 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.81.5	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.81.6	The Permittee must limit Filterable Particulate Matter <= 0.032 grams per dry standard cubic meter 3-hour average (0.014 grains per dry standard cubic foot). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]
5.81.7	PM < 10 micron <= 0.67 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.81.8	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.81.9	PM < 2.5 micron <= 0.67 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.81.10	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.81.11	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]

Requirement number	Requirement and citation
5.81.12	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows: 40 CFR 60.670(a)(1); 40 CFR 60.670(d)(1)-(3); 40 CFR 60.670(e) & (f); 40 CFR 60.671; 40 CFR 60.672(a); 40 CFR 60.673(a) & (b); 40 CFR 60.674(d); 40 CFR 60.675(a), (b), & (e); 40 CFR 60.675(b)(1); 40 CFR 60.675(e); 40 CFR 60.675(e)(2)-(4); 40 CFR 60.675(e)(2)(i)-(iii); 40 CFR 60.676(a); 40 CFR 60.676(a)(1); 40 CFR 60.676(a)(1)(i) & (ii); 40 CFR 60.676(b)(2); 40 CFR 60.676(f), (h), (i), & (k); 40 CFR 60.676(i)(1); 40 CFR pt. 60, subp. OOO, Table 1, as specified elsewhere in this permit; and 40 CFR pt. 60, subp. OOO, Table 2 (after April 22, 2008; PM limit only). A copy of 40 CFR pt. 60, subp. OOO is included in Appendix L. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]
5.81.13	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(3) & (4); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a), (d), (f), & (g); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A),

Requirement number	Requirement and citation
	Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 294	**2100 Tonne Stone Bin**
5.82.1	The Permittee must vent emissions from EQUI 294 to control equipment meeting the requirements of TREA 123 whenever EQUI 294 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.82.2	The Permittee must vent emissions from EQUI 294 to control equipment meeting the requirements of TREA 123 whenever EQUI 294 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.82.3	Filterable Particulate Matter <= 0.018 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.82.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.82.5	PM < 10 micron <= 0.018 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.82.6	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.82.7	PM < 2.5 micron <= 0.018 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.82.8	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.82.9	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.82.10	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(a) and (f), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]
5.82.11	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows: 40 CFR 60.670(a)(1); 40 CFR 60.670(d)(1)-(3); 40 CFR 60.670(e) & (f); 40 CFR 60.671; 40 CFR 60.672(a) & (f); 40 CFR 60.673(a) & (b); 40 CFR 60.674(d); 40 CFR 60.675(b) & (e); 40 CFR 60.675(b)(2); 40 CFR 60.675(c)(2)(i) & (ii); 40 CFR 60.675(e)(1) & (2); 40 CFR 60.675(e)(1)(i) & (ii); 40 CFR 60.675(e)(2)(i)-(iii); 40 CFR 60.675(g); 40 CFR 60.676(a); 40 CFR 60.676(a)(4);

Requirement number	Requirement and citation
	40 CFR 60.676(a)(4)(i) & (ii); 40 CFR 60.676(b)(2); 40 CFR 60.676(f), (h), (i), & (k); 40 CFR 60.676(i)(1); 40 CFR pt. 60, subp. OOO, Table 1, as specified elsewhere in this permit; and 40 CFR pt. 60, subp. OOO, Table 2 (after April 22, 2008; opacity limit only). A copy of 40 CFR pt. 60, subp. OOO is included in Appendix L. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]
5.82.12	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(b)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 295	**5500 Tonne Limestone Storage Bin**
5.83.1	The Permittee must vent emissions from EQUI 295 to control equipment meeting the requirements of TREA 124 whenever EQUI 295 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.83.2	The Permittee must vent emissions from EQUI 295 to control equipment meeting the requirements of TREA 124 whenever EQUI 295 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.83.3	Filterable Particulate Matter <= 0.097 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]

Requirement number	Requirement and citation
5.83.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.83.5	PM < 10 micron <= 0.097 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.83.6	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.83.7	PM < 2.5 micron <= 0.097 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.83.8	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.83.9	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.83.10	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(a) and (f), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]
5.83.11	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows: 40 CFR 60.670(a)(1); 40 CFR 60.670(d)(1)-(3); 40 CFR 60.670(e) & (f); 40 CFR 60.671; 40 CFR 60.672(a) & (f); 40 CFR 60.673(a) & (b); 40 CFR 60.674(c); 40 CFR 60.675(b) & (e); 40 CFR 60.675(b)(2); 40 CFR 60.675(c)(2)(i); 40 CFR 60.675(e)(2); 40 CFR 60.675(e)(2)(i)-(iii); 40 CFR 60.675(g); 40 CFR 60.676(a); 40 CFR 60.676(a)(4); 40 CFR 60.676(a)(4)(i) & (ii); 40 CFR 60.676(b)(1); 40 CFR 60.676(f), (h), (i), & (k); 40 CFR 60.676(i)(1); 40 CFR pt. 60, subp. OOO, Table 1, as specified elsewhere in this permit; and 40 CFR pt. 60, subp. OOO, Table 2 (after April 22, 2008; opacity limit only). A copy of 40 CFR pt. 60, subp. OOO is included in Appendix L. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]
5.83.12	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c);

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	40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(b)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 296	**5500 Tonne Dolomite Storage Bin**
5.84.1	The Permittee must vent emissions from EQUI 296 to control equipment meeting the requirements of TREA 125 whenever EQUI 296 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.84.2	The Permittee must vent emissions from EQUI 296 to control equipment meeting the requirements of TREA 125 whenever EQUI 296 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.84.3	Filterable Particulate Matter <= 0.097 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.84.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.84.5	PM < 10 micron <= 0.097 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.84.6	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.84.7	PM < 2.5 micron <= 0.097 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.84.8	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]

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5.84.9	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.84.10	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(a) and (f), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]
5.84.11	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows: 40 CFR 60.670(a)(1); 40 CFR 60.670(d)(1)-(3); 40 CFR 60.670(e) & (f); 40 CFR 60.671; 40 CFR 60.672(a) & (f); 40 CFR 60.673(a) & (b); 40 CFR 60.674(c); 40 CFR 60.675(b) & (e); 40 CFR 60.675(b)(2); 40 CFR 60.675(c)(2)(i); 40 CFR 60.675(e)(2); 40 CFR 60.675(e)(2)(i)-(iii); 40 CFR 60.675(g); 40 CFR 60.676(a); 40 CFR 60.676(a)(4); 40 CFR 60.676(a)(4)(i) & (ii); 40 CFR 60.676(b)(1); 40 CFR 60.676(f), (h), (i), & (k); 40 CFR 60.676(i)(1); 40 CFR pt. 60, subp. OOO, Table 1, as specified elsewhere in this permit; and 40 CFR pt. 60, subp. OOO, Table 2 (after April 22, 2008; opacity limit only). A copy of 40 CFR pt. 60, subp. OOO is included in Appendix L. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]
5.84.12	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(b)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19.

Requirement number	Requirement and citation
	A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 297	**Train Unloading Conveyor**
5.85.1	The Permittee must vent emissions from EQUI 297 to control equipment meeting the requirements of TREA 126 whenever EQUI 297 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.85.2	The Permittee must vent emissions from EQUI 297 to control equipment meeting the requirements of TREA 126 whenever EQUI 297 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.85.3	Filterable Particulate Matter <= 0.013 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.85.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.85.5	The Permittee must limit Filterable Particulate Matter <= 0.032 grams per dry standard cubic meter 3-hour average (0.014 grains per dry standard cubic foot). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]
5.85.6	PM < 10 micron <= 0.013 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.85.7	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.85.8	PM < 2.5 micron <= 0.013 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.85.9	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.85.10	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.85.11	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows: 40 CFR 60.670(a)(1); 40 CFR 60.670(d)(1)-(3); 40 CFR 60.670(e) & (f); 40 CFR 60.671; 40 CFR 60.672(a); 40 CFR 60.673(a) & (b); 40 CFR 60.674(d); 40 CFR 60.675(a), (b), & (e); 40 CFR 60.675(b)(1);

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	40 CFR 60.675(e); 40 CFR 60.675(e)(2)-(4); 40 CFR 60.675(e)(2)(i)-(iii); 40 CFR 60.676(a); 40 CFR 60.676(a)(3); 40 CFR 60.676(a)(3)(i) & (ii); 40 CFR 60.676(b)(2); 40 CFR 60.676(f), (h), (i), & (k); 40 CFR 60.676(i)(1); 40 CFR pt. 60, subp. OOO, Table 1, as specified elsewhere in this permit; and 40 CFR pt. 60, subp. OOO, Table 2 (after April 22, 2008; PM limit only). A copy of 40 CFR pt. 60, subp. OOO is included in Appendix L. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]
5.85.12	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(3) & (4); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a), (d), (f), & (g); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 298	**Overland Conveyor**
5.86.1	The Permittee must vent emissions from EQUI 298 to control equipment meeting the requirements of TREA 127 whenever EQUI 298 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.86.2	The Permittee must vent emissions from EQUI 298 to control equipment meeting the requirements of TREA 127 whenever EQUI 298 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to

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	avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.86.3	Filterable Particulate Matter <= 0.013 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.86.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.86.5	The Permittee must limit Filterable Particulate Matter <= 0.032 grams per dry standard cubic meter 3-hour average (0.014 grains per dry standard cubic foot). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]
5.86.6	PM < 10 micron <= 0.013 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.86.7	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.86.8	PM < 2.5 micron <= 0.013 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.86.9	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.86.10	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.86.11	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows: 40 CFR 60.670(a)(1); 40 CFR 60.670(d)(1)-(3); 40 CFR 60.670(e) & (f); 40 CFR 60.671; 40 CFR 60.672(a); 40 CFR 60.673(a) & (b); 40 CFR 60.674(d); 40 CFR 60.675(a), (b), & (e); 40 CFR 60.675(b)(1); 40 CFR 60.675(e); 40 CFR 60.675(e)(2)-(4); 40 CFR 60.675(e)(2)(i)-(iii); 40 CFR 60.676(a); 40 CFR 60.676(a)(3); 40 CFR 60.676(a)(3)(i) & (ii); 40 CFR 60.676(b)(2); 40 CFR 60.676(f), (h), (i), & (k); 40 CFR 60.676(i)(1); 40 CFR pt. 60, subp. OOO, Table 1, as specified elsewhere in this permit; and 40 CFR pt. 60, subp. OOO, Table 2 (after April 22, 2008; PM limit only). A copy of 40 CFR pt. 60, subp. OOO is included in Appendix L. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]

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5.86.12	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(3) & (4); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a), (d), (f), & (g); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 299	**Limestone and Dolomite Grinding Mill**
5.87.1	The Permittee must vent emissions from EQUI 299 to control equipment meeting the requirements of TREA 128 whenever EQUI 299 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.87.2	The Permittee must vent emissions from EQUI 299 to control equipment meeting the requirements of TREA 128 whenever EQUI 299 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.87.3	Filterable Particulate Matter <= 0.63 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.87.4	Filterable Particulate Matter <= 0.0020 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.87.5	The Permittee must limit Filterable Particulate Matter <= 0.032 grams per dry standard cubic meter 3-hour average (0.014 grains per dry standard cubic foot). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]
5.87.6	PM < 10 micron <= 0.63 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.87.7	PM < 10 micron <= 0.0020 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.87.8	PM < 2.5 micron <= 0.63 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR

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	52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.87.9	PM < 2.5 micron <= 0.0020 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.87.10	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.87.11	Fuel Usage: Natural Gas Only. [Minn. R. 7007.0100, subp. 35a]
5.87.12	Fuel Usage: The Permittee shall keep records of fuel type and usage on a monthly basis. [Minn. R. 7007.0800, subps. 4&5]
5.87.13	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows: 40 CFR 60.670(a)(1); 40 CFR 60.670(d)(1)-(3); 40 CFR 60.670(e) & (f); 40 CFR 60.671; 40 CFR 60.672(a); 40 CFR 60.673(a) & (b); 40 CFR 60.674(d); 40 CFR 60.675(a), (b), & (e); 40 CFR 60.675(b)(1); 40 CFR 60.675(e); 40 CFR 60.675(e)(2)-(4); 40 CFR 60.675(e)(2)(i)-(iii); 40 CFR 60.676(a); 40 CFR 60.676(a)(1); 40 CFR 60.676(a)(1)(i) & (ii); 40 CFR 60.676(b)(2); 40 CFR 60.676(f), (h), (i), & (k); 40 CFR 60.676(i)(1); 40 CFR pt. 60, subp. OOO, Table 1, as specified elsewhere in this permit; and 40 CFR pt. 60, subp. OOO, Table 2 (after April 22, 2008; PM limit only). A copy of 40 CFR pt. 60, subp. OOO is included in Appendix L. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]
5.87.14	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(3) & (4); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a), (d), (f), & (g);

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	40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 300	**Pellet Bunker Tripper Conveyor**
5.88.1	The Permittee must vent emissions from EQUI 300 to control equipment meeting the requirements of TREA 148 whenever EQUI 300 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.88.2	The Permittee must vent emissions from EQUI 300 to control equipment meeting the requirements of TREA 148 whenever EQUI 300 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.88.3	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.88.4	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.88.5	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.88.6	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8;

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	40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 301	**Emergency Reclaim Pump**
5.89.1	Filterable Particulate Matter <= 0.15 grams per horsepower-hour. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.89.2	The Permittee must limit emissions of Particulate Matter <= 0.20 grams per kilowatt-hour as described in 40 CFR pt. 1039, Appendix I. [40 CFR 60.4202(a)(2), 40 CFR 60.4205(b), Minn. R. 7011.2305]
5.89.3	PM < 10 micron <= 0.15 grams per horsepower-hour. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.89.4	PM < 2.5 micron <= 0.15 grams per horsepower-hour. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.89.5	The Permittee must limit emissions of Carbon Monoxide <= 3.5 grams per kilowatt-hour as described in 40 CFR pt. 1039, Appendix I. [40 CFR 60.4202(a)(2), 40 CFR 60.4205(b), Minn. R. 7011.2305]
5.89.6	The Permittee must limit emissions of NMHC+NOx <= 6.4 grams per kilowatt-hour as described in 40 CFR pt. 1039, Appendix I. [40 CFR 60.4202(a)(2), 40 CFR 60.4205(b), Minn. R. 7011.2305]
5.89.7	Sulfur Dioxide <= 0.0015 pounds per million Btu heat input. The potential to emit from the unit is 0.0015 lb/MMBtu due to equipment design and allowable fuels. [Minn. R. 7011.2300, subp. 2(B)]
5.89.8	Opacity <= 5 percent opacity 6-minute average once operating temperatures have been attained. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.89.9	The Permittee must limit emissions of Opacity <= 20 percent opacity during the acceleration mode. [40 CFR 60.4202(a)(2), 40 CFR 60.4205(b), Minn. R. 7011.2305]
5.89.10	The Permittee must limit emissions of Opacity <= 15 percent opacity during the lugging mode. [40 CFR 60.4202(a)(2), 40 CFR 60.4205(b), Minn. R. 7011.2305]
5.89.11	The Permittee must limit emissions of Opacity <= 50 percent opacity during the peaks in either the acceleration or lugging modes. [40 CFR 60.4202(a)(2), 40 CFR 60.4205(b), Minn. R. 7011.2305]
5.89.12	Opacity <= 20 percent opacity once operating temperatures have been attained. [Minn. R. 7011.2300, subp. 1]
5.89.13	Fuel type: The Permittee shall use only #1 diesel, #2 diesel, or #2 fuel oil. [Minn. R. 7005.0100, subp. 35a]
5.89.14	Sulfur Content of Fuel <= 0.0015 percent by weight. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.89.15	The Permittee must limit Sulfur Content of Fuel <= 15.0 parts per million and either a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume, as required by 40 CFR 1090.305. [40 CFR 60.4207(b), Minn. R. 7011.2305]
5.89.16	The Permittee shall keep records of fuel type and usage on a monthly basis. [Minn. R. 7007.0800, subp.

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	5]
5.89.17	Fuel Supplier Certification: The Permittee shall obtain and maintain a fuel supplier certification for each shipment of diesel fuel oil, certifying that the sulfur content does not exceed 0.0015 percent by weight. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.89.18	Hours of Operation: The Permittee shall maintain documentation on site that the unit is an emergency generator by design that qualifies under the U.S. EPA memorandum entitled "Calculating Potential to Emit (PTE) for Emergency Generators" dated September 6, 1995, that allows calculation of potential emissions based on 500 operating hours per year. [Minn. R. 7007.0800, subps. 4-5]
5.89.19	The Permittee shall follow the engine manufacturer's recommended operation and maintenance specifications for good combustion practices. The Permittee shall maintain records of all maintenance activities conducted on the engine showing that the engine manufacturer's specifications were met. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.89.20	Best Management Practices for Internal Combustion Engines (ICE) 1. The Permittee must only use diesel fuel with a sulfur content of less than or equal to 15 ppm in the emergency engines. 2. The Permittee may not install a rain cap on the emergency engine stack. 3. The Permittee must make the test runs for each engine as short as allowed by insurance and building code considerations. 4. The testing for an emergency engine shall not occur while another emergency engine is being tested. 5. No testing shall be conducted on a day the Air Quality Index (AQI) or the forecasted AQI (found on the MPCA website) exceeds 90, unless the test cannot be deferred. [Stage 1]. [Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.89.21	Permittee must record the following information for each test of each engine: 1. The unit that was tested; 2. The date; 3. The time the test started; 4. The time the test was completed; and 5. The Air Quality Index (AQI) at the time the test began. If testing was conducted on a day with the AQI above 90, document the reason it was not possible to defer the test. [Stage 1]. [Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.89.22	Performance Test: Upon the request of the Commissioner, the Permittee shall conduct a performance test for any or all of the following pollutants, including, but not limited to: PM, PM10, PM2.5, SO2, NOx, CO, VOC, and opacity. [Minn. R. 7017.2020, subp. 1]
5.89.23	At the time of permit issuance, EQUI 301 is considered a new affected source under 40 CFR pt. 63, subp. ZZZZ as defined at 40 CFR 63.6590(a)(2)(i). However, this unit meets the criteria in 40 CFR 63.6590(b)(1)(i) so no requirements of 40 CFR pt. 63, subps. A and ZZZZ, except the initial notification requirements of 40 CFR 63.6645(f), apply. [40 CFR 63.6590(a)(2)(i) and (b)(1)(i), Minn. R. 7011.8150]
5.89.24	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. IIII as follows: 40 CFR 60.4200(a)(2)(i); 40 CFR 60.4202(a)(2); 40 CFR 60.4205(b); 40 CFR 60.4206; 40 CFR 60.4207(b); 40 CFR 60.4208(a); 40 CFR 60.4209(a); 40 CFR 60.4211(a); 40 CFR 60.4211(c); 40 CFR 60.4211(f)(1); 40 CFR 60.4211(f)(2)(i);

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	40 CFR 60.4211(f)(3); 40 CFR 60.4214(b); 40 CFR 60.4214(d); 40 CFR 60.4214(g)-(j); 40 CFR 60.4218; 40 CFR 60.4219; and 40 CFR pt. 60, subp. IIII, Table 8. A copy of 40 CFR pt. 60, subp. IIII is included in Appendix M. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. IIII, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2305]
5.89.25	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(3) & (4); 40 CFR 60.7(b); 40 CFR 60.9; 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 302	**Emergency Pit Water Pump**
5.90.1	Filterable Particulate Matter <= 0.15 grams per horsepower-hour. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.90.2	The Permittee must limit emissions of Particulate Matter <= 0.20 grams per kilowatt-hour as described in 40 CFR pt. 1039, Appendix I. [40 CFR 60.4202(a)(2), 40 CFR 60.4205(b), 40 CFR 63.6590(c), Minn. R. 7011.2305, Minn. R. 7011.8150]
5.90.3	PM < 10 micron <= 0.15 grams per horsepower-hour. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.90.4	PM < 2.5 micron <= 0.15 grams per horsepower-hour. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.90.5	The Permittee must limit emissions of Carbon Monoxide <= 3.5 grams per kilowatt-hour as described in 40 CFR pt. 1039, Appendix I. [40 CFR 60.4202(a)(2), 40 CFR 60.4205(b), 40 CFR 63.6590(c), Minn. R. 7011.2305, Minn. R. 7011.8150]
5.90.6	The Permittee must limit emissions of NMHC+NOx <= 6.4 grams per kilowatt-hour as described in 40 CFR pt. 1039, Appendix I. [40 CFR 60.4202(a)(2), 40 CFR 60.4205(b), 40 CFR 63.6590(c), Minn. R.

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	7011.2305, Minn. R. 7011.8150]
5.90.7	Sulfur Dioxide <= 0.0015 pounds per million Btu heat input. The potential to emit from the unit is 0.0015 lb/MMBtu due to equipment design and allowable fuels. [Minn. R. 7011.2300, subp. 2(B)]
5.90.8	Opacity <= 5 percent opacity 6-minute average once operating temperatures have been attained. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.90.9	The Permittee must limit emissions of Opacity <= 20 percent opacity during the acceleration mode. [40 CFR 60.4202(a)(2), 40 CFR 60.4205(b), 40 CFR 63.6590(c), Minn. R. 7011.2305, Minn. R. 7011.8150]
5.90.10	The Permittee must limit emissions of Opacity <= 15 percent opacity during the lugging mode. [40 CFR 60.4202(a)(2), 40 CFR 60.4205(b), 40 CFR 63.6590(c), Minn. R. 7011.2305, Minn. R. 7011.8150]
5.90.11	The Permittee must limit emissions of Opacity <= 50 percent opacity during the peaks in either the acceleration or lugging modes. [40 CFR 60.4202(a)(2), 40 CFR 60.4205(b), 40 CFR 63.6590(c), Minn. R. 7011.2305, Minn. R. 7011.8150]
5.90.12	Opacity <= 20 percent opacity once operating temperatures have been attained. [Minn. R. 7011.2300, subp. 1]
5.90.13	Fuel type: The Permittee shall use only #1 diesel, #2 diesel, or #2 fuel oil. [Minn. R. 7005.0100, subp. 35a]
5.90.14	Sulfur Content of Fuel <= 0.0015 percent by weight. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.90.15	The Permittee must limit Sulfur Content of Fuel <= 15.0 parts per million and either a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume, as required by 40 CFR 1090.305. [40 CFR 60.4207(b), 40 CFR 63.6590(c), Minn. R. 7011.2305, Minn. R. 7011.8150]
5.90.16	The Permittee shall keep records of fuel type and usage on a monthly basis. [Minn. R. 7007.0800, subp. 5]
5.90.17	Fuel Supplier Certification: The Permittee shall obtain and maintain a fuel supplier certification for each shipment of diesel fuel oil, certifying that the sulfur content does not exceed 0.0015 percent by weight. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.90.18	Hours of Operation: The Permittee shall maintain documentation on site that the unit is an emergency generator by design that qualifies under the U.S. EPA memorandum entitled "Calculating Potential to Emit (PTE) for Emergency Generators" dated September 6, 1995, that allows calculation of potential emissions based on 500 operating hours per year. [Minn. R. 7007.0800, subps. 4-5]
5.90.19	The Permittee shall follow the engine manufacturer's recommended operation and maintenance specifications for good combustion practices. The Permittee shall maintain records of all maintenance activities conducted on the engine showing that the engine manufacturer's specifications were met. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.90.20	Best Management Practices for Internal Combustion Engines (ICE) 1. The Permittee must only use diesel fuel with a sulfur content of less than or equal to 15 ppm in the emergency engines. 2. The Permittee may not install a rain cap on the emergency engine stack. 3. The Permittee must make the test runs for each engine as short as allowed by insurance and building code considerations. 4. The testing for an emergency engine shall not occur while another emergency engine is being tested. 5. No testing shall be conducted on a day the Air Quality Index (AQI) or the forecasted AQI (found on the MPCA website) exceeds 90, unless the test cannot be deferred. [Stage 1]. [Title I Condition: 40 CFR 52.21(k)(modeling) and Minn. R. 7007.3000]
5.90.21	Permittee must record the following information for each test of each engine: 1. The unit that was tested; 2. The date; 3. The time the test started;

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	4. The time the test was completed; and 5. The Air Quality Index (AQI) at the time the test began. If testing was conducted on a day with the AQI above 90, document the reason it was not possible to defer the test. [Stage 1]. [Title I Condition: 40 CFR 52.21(k)(modeling) and Minn. R. 7007.3000]
5.90.22	Performance Test: Upon the request of the Commissioner, the Permittee shall conduct a performance test for any or all of the following pollutants, including, but not limited to: PM, PM10, PM2.5, SO2, NOx, CO, VOC, and opacity. [Minn. R. 7017.2020, subp. 1]
5.90.23	EQUI 302 is a new affected source as defined under 40 CFR pt. 63, subp. ZZZZ, and the facility is a major source as defined at 40 CFR 63.2, and EQUI 302 is an emergency compression ignition RICE with a site rating of less than 500 brake HP. The Permittee shall meet the requirements of 40 CFR pt. 63, subp. ZZZZ by meeting the requirements of 40 CFR pt. 60, subp. IIII. No further requirements of 40 CFR pt. 63, subp. ZZZZ apply to EQUI 302. [40 CFR 63.6590(c), Minn. R. 7011.8150]
5.90.24	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. IIII as follows: 40 CFR 60.4200(a)(2)(i); 40 CFR 60.4202(a)(2); 40 CFR 60.4205(b); 40 CFR 60.4206; 40 CFR 60.4207(b); 40 CFR 60.4208(a); 40 CFR 60.4209(a); 40 CFR 60.4211(a); 40 CFR 60.4211(c); 40 CFR 60.4211(f)(1); 40 CFR 60.4211(f)(2)(i); 40 CFR 60.4211(f)(3); 40 CFR 60.4214(b); 40 CFR 60.4214(d); 40 CFR 60.4214(g)-(j); 40 CFR 60.4218; 40 CFR 60.4219; and 40 CFR pt. 60, subp. IIII, Table 8. A copy of 40 CFR pt. 60, subp. IIII is included in Appendix M. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR 63.6590(c), 40 CFR pt. 60, subp. IIII, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2305, Minn. R. 7011.8150]
5.90.25	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(3) & (4); 40 CFR 60.7(b); 40 CFR 60.9; 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g);

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	40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR 63.6590(c), 40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.8150, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 303	**Pellet Bunker Product Conveyor**
5.91.1	The Permittee must vent emissions from EQUI 303 to control equipment meeting the requirements of TREA 149 whenever EQUI 303 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.91.2	The Permittee must vent emissions from EQUI 303 to control equipment meeting the requirements of TREA 149 whenever EQUI 303 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.91.3	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.91.4	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.91.5	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.91.6	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9;

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	40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 304	**55 Tonne Day Bin**
5.92.1	The Permittee must vent emissions from EQUI 304 to control equipment meeting the requirements of TREA 154 whenever EQUI 304 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.92.2	The Permittee must vent emissions from EQUI 304 to control equipment meeting the requirements of TREA 154 whenever EQUI 304 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.92.3	Filterable Particulate Matter <= 0.013 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.92.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.92.5	PM < 10 micron <= 0.013 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.92.6	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.92.7	PM < 2.5 micron <= 0.013 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.92.8	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.92.9	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.92.10	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(a) and (f), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]
5.92.11	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows: 40 CFR 60.670(a)(1); 40 CFR 60.670(d)(1)-(3); 40 CFR 60.670(e) & (f);

Requirement number	Requirement and citation
	40 CFR 60.671; 40 CFR 60.672(a) & (f); 40 CFR 60.673(a) & (b); 40 CFR 60.674(c); 40 CFR 60.675(b) & (e); 40 CFR 60.675(b)(2); 40 CFR 60.675(c)(2)(i); 40 CFR 60.675(e)(2); 40 CFR 60.675(e)(2)(i)-(iii); 40 CFR 60.675(g); 40 CFR 60.676(a); 40 CFR 60.676(a)(4); 40 CFR 60.676(a)(4)(i) & (ii); 40 CFR 60.676(b)(1); 40 CFR 60.676(f), (h), (i), & (k); 40 CFR 60.676(i)(1); 40 CFR pt. 60, subp. OOO, Table 1, as specified elsewhere in this permit; and 40 CFR pt. 60, subp. OOO, Table 2 (after April 22, 2008; opacity limit only). A copy of 40 CFR pt. 60, subp. OOO is included in Appendix L. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]
5.92.12	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(b)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 330	**Product Junction House 1**
5.93.1	The Permittee must vent emissions from EQUI 330 to control equipment meeting the requirements of

Requirement number	Requirement and citation
	TREA 18 whenever EQUI 330 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.93.2	The Permittee must vent emissions from EQUI 330 to control equipment meeting the requirements of TREA 18 whenever EQUI 330 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.93.3	Filterable Particulate Matter <= 0.052 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.93.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.93.5	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.93.6	PM < 10 micron <= 0.052 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.93.7	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.93.8	PM < 2.5 micron <= 0.052 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.93.9	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.93.10	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.93.11	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.93.12	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.93.13	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4;

Requirement number	Requirement and citation
	40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 331	**Product Junction House 4**
5.94.1	The Permittee must vent emissions from EQUI 331 to control equipment meeting the requirements of TREA 19 whenever EQUI 331 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.94.2	The Permittee must vent emissions from EQUI 331 to control equipment meeting the requirements of TREA 19 whenever EQUI 331 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.94.3	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.94.4	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.94.5	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.94.6	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c);

Requirement number	Requirement and citation
	40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 332	**Pneumatic Transport Vent 3**
5.95.1	The Permittee must vent emissions from EQUI 332 to control equipment meeting the requirements of TREA 158 whenever EQUI 332 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.95.2	The Permittee must vent emissions from EQUI 332 to control equipment meeting the requirements of TREA 158 whenever EQUI 332 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.95.3	Filterable Particulate Matter <= 0.010 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.95.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.95.5	Particulate Matter <= 0.30 grains per dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. Because it has been shown that the facility does not cause a violation of ambient air quality standards, and is located outside the Mpls/St. Paul air quality control region and the city of Duluth, and is located at least 1/4 mile from any residence or public roadway, and the industrial process equipment is controlled by control equipment which has a collection efficiency of 85% by weight, this industrial process equipment is considered to be in compliance with this requirement. [Minn. R. 7011.0715, subps. 1(A) and 3]
5.95.6	PM < 10 micron <= 0.010 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]

Requirement number	Requirement and citation
5.95.7	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.95.8	PM < 2.5 micron <= 0.010 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.95.9	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.95.10	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.95.11	Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)]
EQUI 333	**Coarse Ore Mill Bay Tunnel 2**
5.96.1	The Permittee must vent emissions from EQUI 333 to control equipment meeting the requirements of TREA 134 whenever EQUI 333 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.96.2	The Permittee must vent emissions from EQUI 333 to control equipment meeting the requirements of TREA 134 whenever EQUI 333 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.96.3	Filterable Particulate Matter <= 0.11 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.96.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.96.5	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.96.6	PM < 10 micron <= 0.11 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.96.7	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.96.8	PM < 2.5 micron <= 0.11 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.96.9	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.96.10	Lead <= 1.3E-06 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent EQUI 333 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore lead concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent EQUI 333 performance test. This determination will be made for each EQUI 333 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]

Requirement number	Requirement and citation
5.96.11	Fluorides <= 1.1E-07 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent EQUI 333 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore fluorides concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent EQUI 333 performance test. This determination will be made for each EQUI 333 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.96.12	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.96.13	Opacity <= 7 percent opacity 6-minute average. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.96.14	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.96.15	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.96.16	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A),

Requirement number	Requirement and citation
	Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 334	**Coarse Ore Mill Bay Tunnel 3**
5.97.1	The Permittee must vent emissions from EQUI 334 to control equipment meeting the requirements of TREA 135 whenever EQUI 334 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.97.2	The Permittee must vent emissions from EQUI 334 to control equipment meeting the requirements of TREA 135 whenever EQUI 334 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.97.3	Filterable Particulate Matter <= 0.11 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.97.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.97.5	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.97.6	PM < 10 micron <= 0.11 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.97.7	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.97.8	PM < 2.5 micron <= 0.11 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.97.9	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.97.10	Lead <= 1.3E-06 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent EQUI 334 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore lead concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent EQUI 334 performance test. This determination will be made for each EQUI 334 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.97.11	Fluorides <= 1.1E-07 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent EQUI 334 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore fluorides concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent EQUI 334 performance test. This determination will be made for each EQUI 334 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.97.12	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.97.13	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]

Requirement number	Requirement and citation
5.97.14	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.97.15	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 335	**Fine Ore Mill Bay Tunnel 1B**
5.98.1	The Permittee must vent emissions from EQUI 335 to control equipment meeting the requirements of TREA 129 whenever EQUI 335 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.98.2	The Permittee must vent emissions from EQUI 335 to control equipment meeting the requirements of TREA 129 whenever EQUI 335 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]

Requirement number	Requirement and citation
5.98.3	Filterable Particulate Matter <= 0.073 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.98.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.98.5	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.98.6	PM < 10 micron <= 0.073 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.98.7	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.98.8	PM < 2.5 micron <= 0.073 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.98.9	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.98.10	Lead <= 8.8E-07 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent EQUI 335 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore lead concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent EQUI 335 performance test. This determination will be made for each EQUI 335 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.98.11	Fluorides <= 7.3E-08 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent EQUI 335 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore fluorides concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent EQUI 335 performance test. This determination will be made for each EQUI 335 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.98.12	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.98.13	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.98.14	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60,

Requirement number	Requirement and citation
	subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.98.15	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 336	**Fine Ore Mill Bay Tunnel 2A**
5.99.1	The Permittee must vent emissions from EQUI 336 to control equipment meeting the requirements of TREA 130 whenever EQUI 336 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.99.2	The Permittee must vent emissions from EQUI 336 to control equipment meeting the requirements of TREA 130 whenever EQUI 336 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.99.3	Filterable Particulate Matter <= 0.073 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.99.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.99.5	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.99.6	PM < 10 micron <= 0.073 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.99.7	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]

Requirement number	Requirement and citation
5.99.8	PM < 2.5 micron <= 0.073 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.99.9	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.99.10	Lead <= 8.8E-07 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent EQUI 336 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore lead concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent EQUI 336 performance test. This determination will be made for each EQUI 336 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.99.11	Fluorides <= 7.3E-08 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent EQUI 336 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore fluorides concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent EQUI 336 performance test. This determination will be made for each EQUI 336 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.99.12	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.99.13	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.99.14	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.99.15	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9;

Requirement number	Requirement and citation
	40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 337	**Fine Ore Mill Bay Tunnel 2B**
5.100.1	The Permittee must vent emissions from EQUI 337 to control equipment meeting the requirements of TREA 131 whenever EQUI 337 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.100.2	The Permittee must vent emissions from EQUI 337 to control equipment meeting the requirements of TREA 131 whenever EQUI 337 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.100.3	Filterable Particulate Matter <= 0.073 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.100.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.100.5	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.100.6	PM < 10 micron <= 0.073 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.100.7	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.100.8	PM < 2.5 micron <= 0.073 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.100.9	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.100.10	Lead <= 8.8E-07 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent EQUI 337 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore lead concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent EQUI 337 performance test. This determination will be made for each EQUI 337 filterable particulate matter

Requirement number	Requirement and citation
	performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.100.11	Fluorides <= 7.3E-08 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent EQUI 337 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore fluorides concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent EQUI 337 performance test. This determination will be made for each EQUI 337 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.100.12	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.100.13	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.100.14	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.100.15	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A),

Requirement number	Requirement and citation
	Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 338	**Fine Ore Mill Bay Tunnel 3A**
5.101.1	The Permittee must vent emissions from EQUI 338 to control equipment meeting the requirements of TREA 132 whenever EQUI 338 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.101.2	The Permittee must vent emissions from EQUI 338 to control equipment meeting the requirements of TREA 132 whenever EQUI 338 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.101.3	Filterable Particulate Matter <= 0.073 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.101.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.101.5	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.101.6	PM < 10 micron <= 0.073 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.101.7	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.101.8	PM < 2.5 micron <= 0.073 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.101.9	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.101.10	Lead <= 8.8E-07 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent EQUI 338 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore lead concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent EQUI 338 performance test. This determination will be made for each EQUI 338 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.101.11	Fluorides <= 7.3E-8 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent EQUI 338 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore fluorides concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent EQUI 338 performance test. This determination will be made for each EQUI 338 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.101.12	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.101.13	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]

Requirement number	Requirement and citation
5.101.14	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.101.15	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 339	**Fine Ore Mill Bay Tunnel 3B**
5.102.1	The Permittee must vent emissions from EQUI 339 to control equipment meeting the requirements of TREA 133 whenever EQUI 339 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.102.2	The Permittee must vent emissions from EQUI 339 to control equipment meeting the requirements of TREA 133 whenever EQUI 339 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]

Requirement number	Requirement and citation
5.102.3	Filterable Particulate Matter <= 0.073 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.102.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.102.5	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.102.6	PM < 10 micron <= 0.073 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.102.7	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.102.8	PM < 2.5 micron <= 0.073 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.102.9	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.102.10	Lead <= 8.8E-07 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent EQUI 339 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore lead concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent EQUI 339 performance test. This determination will be made for each EQUI 339 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.102.11	Fluorides <= 7.3E-08 pounds per hour 3-hour average. To demonstrate compliance with this emission limit, the Permittee shall multiply the most recent EQUI 339 filterable particulate matter performance test result (in units of pounds per hour) by the highest 12-month rolling average crude ore fluorides concentration value (as determined by the requirements of COMG 23) that occurred within the 12 calendar months preceding the most recent EQUI 339 performance test. This determination will be made for each EQUI 339 filterable particulate matter performance test. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.102.12	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.102.13	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.102.14	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60,

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	subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.102.15	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 340	**Bentonite Unloading**
5.103.1	The Permittee must vent emissions from EQUI 340 to control equipment meeting the requirements of TREA 9 and TREA 153 whenever EQUI 340 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.103.2	The Permittee must vent emissions from EQUI 340 to control equipment meeting the requirements of TREA 9 and TREA 153 whenever EQUI 340 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.103.3	The Permittee must close all rail access doors whenever EQUI 340 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.103.4	Filterable Particulate Matter <= 0.12 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.103.5	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.103.6	Particulate Matter <= 0.30 grains per dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. Because it has been shown that the facility does not cause a violation of ambient air quality standards, and is located outside the Mpls/St. Paul air quality control region and the city of Duluth, and is located at least 1/4 mile from any residence or public roadway, and the industrial process equipment is

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	controlled by control equipment which has a collection efficiency of 85% by weight, this industrial process equipment is considered to be in compliance with this requirement. [Minn. R. 7011.0715, subps. 1(A) and 3]
5.103.7	PM < 10 micron <= 0.12 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.103.8	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.103.9	PM < 2.5 micron <= 0.12 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.103.10	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.103.11	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.103.12	Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)]
EQUI 341	**Bentonite Receiving Bin 1**
5.104.1	The Permittee must vent emissions from EQUI 341 to control equipment meeting the requirements of TREA 138 whenever EQUI 341 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.104.2	The Permittee must vent emissions from EQUI 341 to control equipment meeting the requirements of TREA 138 whenever EQUI 341 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.104.3	Filterable Particulate Matter <= 0.12 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.104.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.104.5	PM < 10 micron <= 0.12 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.104.6	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.104.7	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.104.8	PM < 2.5 micron <= 0.12 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.104.9	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.104.10	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(a) & (f), 40 CFR 60.672(b), 40

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	CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]
5.104.11	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows: 40 CFR 60.670(a)(1); 40 CFR 60.670(d)(1)-(3); 40 CFR 60.670(e) & (f); 40 CFR 60.671; 40 CFR 60.672(a) & (f); 40 CFR 60.673(a) & (b); 40 CFR 60.674(c); 40 CFR 60.675(b) & (e); 40 CFR 60.675(b)(2); 40 CFR 60.675(c)(2)(i); 40 CFR 60.675(e)(2); 40 CFR 60.675(e)(2)(i)-(iii); 40 CFR 60.675(g); 40 CFR 60.676(a); 40 CFR 60.676(a)(4); 40 CFR 60.676(a)(4)(i) & (ii); 40 CFR 60.676(b)(1); 40 CFR 60.676(f), (h), (i), & (k); 40 CFR 60.676(i)(1); 40 CFR pt. 60, subp. OOO, Table 1, as specified elsewhere in this permit; and 40 CFR pt. 60, subp. OOO, Table 2 (after April 22, 2008; opacity limit only). A copy of 40 CFR pt. 60, subp. OOO is included in Appendix L. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]
5.104.12	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(b)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in

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	the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 342	**Bentonite Receiving Bin 2**
5.105.1	The Permittee must vent emissions from EQUI 342 to control equipment meeting the requirements of TREA 10 whenever EQUI 342 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.105.2	The Permittee must vent emissions from EQUI 342 to control equipment meeting the requirements of TREA 10 whenever EQUI 342 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.105.3	Filterable Particulate Matter <= 0.12 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.105.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.105.5	PM < 10 micron <= 0.12 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.105.6	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.105.7	PM < 2.5 micron <= 0.12 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.105.8	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.105.9	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.105.10	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(a) & (f), 40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO, Minn. R. 7011.3350]
5.105.11	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows: 40 CFR 60.670(a)(1); 40 CFR 60.670(d)(1)-(3); 40 CFR 60.670(e) & (f); 40 CFR 60.671; 40 CFR 60.672(a) & (f); 40 CFR 60.673(a) & (b); 40 CFR 60.674(c); 40 CFR 60.675(b) & (e); 40 CFR 60.675(b)(2); 40 CFR 60.675(c)(2)(i); 40 CFR 60.675(e)(2); 40 CFR 60.675(e)(2)(i)-(iii); 40 CFR 60.675(g);

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	40 CFR 60.676(a); 40 CFR 60.676(a)(4); 40 CFR 60.676(a)(4)(i) & (ii); 40 CFR 60.676(b)(1); 40 CFR 60.676(f), (h), (i), & (k); 40 CFR 60.676(i)(1); 40 CFR pt. 60, subp. OOO, Table 1, as specified elsewhere in this permit; and 40 CFR pt. 60, subp. OOO, Table 2 (after April 22, 2008; opacity limit only). A copy of 40 CFR pt. 60, subp. OOO is included in Appendix L. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]
5.105.12	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(b)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 343	**Secondary Crusher Lines Bin Feed**
5.106.1	The Permittee must vent emissions from EQUI 343 to control equipment meeting the requirements of TREA 42, TREA 44, TREA, 45, and TREA 46 whenever EQUI 281 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.106.2	The Permittee must vent emissions from EQUI 343 to control equipment meeting the requirements of TREA 42, TREA 44, TREA, 45, and TREA 46 whenever EQUI 281 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]

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5.106.3	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.106.4	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.106.5	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.106.6	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 347	**Pellet Plant Fines Bin Discharge**
5.107.1	The Permittee must vent emissions from EQUI 347 to control equipment meeting the requirements of TREA 19 whenever EQUI 347 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.107.2	The Permittee must vent emissions from EQUI 347 to control equipment meeting the requirements of TREA 19 whenever EQUI 347 operates.

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	This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.107.3	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.107.4	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.107.5	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.107.6	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 376	**Pellet Loadout**
5.108.1	The Permittee must vent emissions from EQUI 376 to control equipment meeting the requirements of TREA 170 whenever EQUI 376 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]

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5.108.2	The Permittee must vent emissions from EQUI 376 to control equipment meeting the requirements of TREA 170 whenever EQUI 376 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.108.3	Filterable Particulate Matter <= 1.3 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.108.4	Filterable Particulate Matter <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.108.5	The Permittee must limit Filterable Particulate Matter <= 0.05 grams per dry standard cubic meter (0.022 gr/dscf). [40 CFR 60.382(a)(1), Minn. R. 7011.2700]
5.108.6	PM < 10 micron <= 1.3 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.108.7	PM < 10 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.108.8	PM < 2.5 micron <= 1.3 pounds per hour 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.108.9	PM < 2.5 micron <= 0.0018 grains per dry standard cubic foot 3-hour average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.108.10	Opacity <= 0 percent opacity 6-minute average except for one six-minute period per hour of not more than 5 percent opacity. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.108.11	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.382(a)(2), Minn. R. 7011.2700]
5.108.12	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. LL, as follows: 40 CFR 60.380; 40 CFR 60.381; 40 CFR 60.382(a)(1) & (2); 40 CFR 60.383; 40 CFR 60.385(a); and 40 CFR 60.386(a) & (b). A copy of 40 CFR pt. 60, subp. LL is included in Appendix K. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. LL, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2700]
5.108.13	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a), (b), & (c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(1), (3), (4), & (6);

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	40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(a)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 383	**Alternative Limestone or Dolomite Deliveries**
5.109.1	The Permittee must vent emissions from EQUI 383 to control equipment meeting the requirements of TREA 136 and TREA 143 whenever EQUI 383 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.109.2	The Permittee must vent emissions from EQUI 383 to control equipment meeting the requirements of TREA 136 and TREA 143 whenever EQUI 383 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.109.3	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(a) & (f), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]
5.109.4	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows: 40 CFR 60.670(a)(1); 40 CFR 60.670(d)(1)-(3); 40 CFR 60.670(e) & (f); 40 CFR 60.671; 40 CFR 60.672(a) & (f); 40 CFR 60.673(a) & (b); 40 CFR 60.674(c); 40 CFR 60.675(b) & (e); 40 CFR 60.675(b)(2); 40 CFR 60.675(c)(2)(i); 40 CFR 60.675(e)(2); 40 CFR 60.675(e)(2)(i)-(iii); 40 CFR 60.675(g); 40 CFR 60.676(a); 40 CFR 60.676(a)(4); 40 CFR 60.676(a)(4)(i) & (ii); 40 CFR 60.676(b)(1); 40 CFR 60.676(f), (h), (i), & (k);

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	40 CFR 60.676(i)(1); 40 CFR pt. 60, subp. OOO, Table 1, as specified elsewhere in this permit; and 40 CFR pt. 60, subp. OOO, Table 2 (after April 22, 2008; opacity limit only). A copy of 40 CFR pt. 60, subp. OOO is included in Appendix L. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]
5.109.5	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(b)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
EQUI 384	**Alternative Additive Deliveries**
5.110.1	The Permittee must vent emissions from EQUI 384 to control equipment meeting the requirements of TREA 144, TREA 145, and TREA 147 whenever EQUI 384 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.110.2	The Permittee must vent emissions from EQUI 384 to control equipment meeting the requirements of TREA 144, TREA 145, and TREA 147 whenever EQUI 384 operates. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.110.3	The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(a) & (f), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]
5.110.4	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:

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	40 CFR 60.670(a)(1); 40 CFR 60.670(d)(1)-(3); 40 CFR 60.670(e) & (f); 40 CFR 60.671; 40 CFR 60.672(a) & (f); 40 CFR 60.673(a) & (b); 40 CFR 60.674(c); 40 CFR 60.675(b) & (e); 40 CFR 60.675(b)(2); 40 CFR 60.675(c)(2)(i); 40 CFR 60.675(e)(2); 40 CFR 60.675(e)(2)(i)-(iii); 40 CFR 60.675(g); 40 CFR 60.676(a); 40 CFR 60.676(a)(4); 40 CFR 60.676(a)(4)(i) & (ii); 40 CFR 60.676(b)(1); 40 CFR 60.676(f), (h), (i), & (k); 40 CFR 60.676(i)(1); 40 CFR pt. 60, subp. OOO, Table 1, as specified elsewhere in this permit; and 40 CFR pt. 60, subp. OOO, Table 2 (after April 22, 2008; opacity limit only). A copy of 40 CFR pt. 60, subp. OOO is included in Appendix L. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]
5.110.5	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a) & (b); 40 CFR 60.7(a)(3), (4), & (6); 40 CFR 60.7(b); 40 CFR 60.8; 40 CFR 60.9; 40 CFR 60.11(b)-(d), (f), & (g); 40 CFR 60.11(e)(1)-(3) & (6)-(8); 40 CFR 60.12; 40 CFR 60.14(a)-(c) & (e)-(g); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix J. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]

Requirement number	Requirement and citation
EQUI 406	**Indurating Furnace Waste Gas Baghouse 2 Leak Detector**
5.111.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 258 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 407	**Indurating Furnace Hood Exhaust Stack Mercury CEMS**
5.112.1	Mercury: Emissions Monitoring: The Permittee shall use a CEMS to measure mercury emissions from EQUI 257. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D)]
EQUI 408	**Indurating Furnace Waste Gas Stack Mercury CEMS**
5.113.1	Mercury: Emissions Monitoring: The Permittee shall use a CEMS to measure mercury emissions from EQUI 258. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D)]
EQUI 409	**Powder Coating Handling Baghouse Bag Leak Detector**
5.114.1	The Permittee must submit a site-specific monitoring plan: Due before Initial Startup Date of EQUI 145 and EQUI 146. The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. Each monitoring plan must describe the items in 40 CFR 60.674(d)(2)(i) through (vi). [40 CFR 60.674(d)(2), Minn. R. 7011.2305]
EQUI 410	**Indurating Furnace Waste Gas Stack Air Flow Rate Monitor**
5.115.1	Air Flow Rate: Monitoring: The Permittee shall use a CEMS to measure air flow rate from EQUI 258. [Stage 1]. [Minn. R. 7017.1006, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
EQUI 411	**Indurating Furnace Hood Exhaust Stack Air Flow Rate Monitor**
5.116.1	Air Flow Rate: Monitoring: The Permittee shall use a CEMS to measure air flow rate from EQUI 257. [Stage 1]. [Minn. R. 7017.1006, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
FUGI 6	**Paved Road Emissions**
5.117.1	The Permittee must follow the procedures specified in the Fugitive Dust Control Plan in Appendix I of this permit to control emissions from FUGI 6. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.117.2	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.117.3	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.117.4	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.117.5	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800,

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5.117.6	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 13	**Out-of-pit Haul Road Emissions**
5.118.1	The Permittee must follow the procedures specified in the Fugitive Dust Control Plan in Appendix I of this permit to control emissions from FUGI 13. The Permittee must apply water to the haul roads at the levels determined by the methods within the Fugitive Dust Control Plan and must maintain all records specified therein. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A) & 2(B), Minn. Stat. 116.07, subd. 4a(a), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.118.2	The Permittee must follow the procedures specified in the Fugitive Dust Control Plan in Appendix I of this permit to control emissions from FUGI 13. The Permittee must apply water to the haul roads at the levels determined by the methods within the Fugitive Dust Control Plan and must maintain all records specified therein. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.118.3	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.118.4	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.118.5	Daily Recordkeeping: On each day of mining operation, the Permittee must determine the if watering is required and the daily minimum watering intensity as determined by the procedures specified by the Fugitive Dust Control Plan in Appendix I of the permit, the actual amount of water applied by the Permittee, and if the Permittee met the daily minimum watering intensity. Any failures to meet the daily minimum watering intensity are considered deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.118.6	Monthly Recordkeeping: By the 15th of the month, the Permittee must calculate and record the following: - The number of days watering was required and the number of days that the Permittee did not meet the daily minimum watering intensities for the previous calendar month; - The total number of days watering was required and the total number of days that the Permittee did not meet the daily minimum watering intensities for the ongoing semi-annual reporting period (January 1 through June 30 or July 1 through December 31); - The percentage of days watering was required that the Permittee did not meet the daily minimum watering intensity for the ongoing semi-annual reporting period. [Minn. R. 7007.0800, subps. 4-5]
5.118.7	If the percentage of days watering was required that the Permittee did not meet the daily minimum watering intensity for a semi-annual reporting period is equal to or greater than 3%, the Permittee must conduct a root cause analysis to determine of the cause(s) of the deviations, document any corrective actions taken, and identify procedures to avoid future deviations. The results of this analysis must be included with the semiannual deviations report required by Minn. R. 7007.0800, subp. 6(A)(2). [Stage 1]. [Minn. R. 7007.0800, subp. 16(L), Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. Stat. 116.07, subd. 4a(a), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.118.8	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist

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	included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.118.9	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.118.10	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 16	**Crude Ore Loadout**
5.119.1	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.119.2	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.119.3	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.119.4	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.119.5	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 20	**Service Road Emissions**
5.120.1	The Permittee must follow the procedures specified in the Fugitive Dust Control Plan in Appendix I of this permit to control emissions from FUGI 20. The Permittee must apply water to the haul roads at the levels determined by the methods within the Fugitive Dust Control Plan and must maintain all records specified therein. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A) & 2(B), Minn. Stat. 116.07, subd. 4a(a), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.120.2	The Permittee must follow the procedures specified in the Fugitive Dust Control Plan in Appendix I of this permit to control emissions from FUGI 20. The Permittee must apply water to the haul roads at the levels determined by the methods within the Fugitive Dust Control Plan and must maintain all records specified therein. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.120.3	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.120.4	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.120.5	Daily Recordkeeping: On each day of mining operation, the Permittee must determine the if watering is required and the daily minimum watering intensity as determined by the procedures specified by the Fugitive Dust Control Plan in Appendix I of the permit, the actual amount of water applied by the Permittee, and if the Permittee met the daily minimum watering intensity. Any failures to meet the daily minimum watering intensity are considered deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R.

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	7007.3000]
5.120.6	Monthly Recordkeeping: By the 15th of the month, the Permittee must calculate and record the following: - The number of days watering was required and the number of days that the Permittee did not meet the daily minimum watering intensities for the previous calendar month; - The total number of days watering was required and the total number of days that the Permittee did not meet the daily minimum watering intensities for the ongoing semi-annual reporting period (January 1 through June 30 or July 1 through December 31); - The percentage of days watering was required that the Permittee did not meet the daily minimum watering intensity for the ongoing semi-annual reporting period. [Minn. R. 7007.0800, subps. 4-5]
5.120.7	If the percentage of days watering was required that the Permittee did not meet the daily minimum watering intensity for a semi-annual reporting period is equal to or greater than 3%, the Permittee must conduct a root cause analysis to determine of the cause(s) of the deviations, document any corrective actions taken, and identify procedures to avoid future deviations. The results of this analysis must be included with the semiannual deviations report required by Minn. R. 7007.0800, subp. 6(A)(2). [Stage 1]. [Minn. R. 7007.0800, subp. 16(L), Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. Stat. 116.07, subd. 4a(a), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.120.8	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.120.9	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.120.10	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 24	**Grading at Tailings Basin**
5.121.1	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.121.2	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.121.3	Operating Hours <= 16 hours per day for all graders at the tailings basin. [Stage 1]. [Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.121.4	Grading Speed <= 4 miles per hour 24-hour block average. [Stage 1]. [Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.121.5	Operating Hours: Daily Recordkeeping. On each day of operation, the Permittee shall record and maintain a record of the total hours of operation for that day. This shall be based on vehicle GPS. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.121.6	Grading Speed: On each day of operation, the Permittee shall determine and record the 24-hour block average grading speed for that day. The determination of the 24-block average grading speed shall only take into account the time that the grader is operating. This shall be based on vehicle GPS. [Stage 1]. [Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.121.7	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.121.8	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800,

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5.121.9	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 25	**Dozer Activity at Tailings Basin**
5.122.1	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.122.2	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.122.3	Operating Hours <= 16 hours per day for all dozers at the tailings basin. [Stage 1]. [Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.122.4	Operating Hours: Daily Recordkeeping. On each day of operation, the Permittee shall record and maintain a record of the total hours of operation for that day. This shall be based on vehicle GPS. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.122.5	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.122.6	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.122.7	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 26	**Tailings Basin Wind Erosion**
5.123.1	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.123.2	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.123.3	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.123.4	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.123.5	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 27	**Product Stockpile Wind Erosion**
5.124.1	The Permittee must control emissions from FUGI 27 using the water sprays TREA 91 whenever FUGI 27 operates. The Permittee must apply water at a rate sufficient to maintain adequate moisture throughout the process and to eliminate visible emissions. [Minn. R. 7005.0100, subp. 35a, Minn. R. 7007.0800, subp. 2(A) and 2(B)]
5.124.2	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.124.3	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]

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5.124.4	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.124.5	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.124.6	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 28	**Overburden/Waste Rock Bulldozer**
5.125.1	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.125.2	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.125.3	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.125.4	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.125.5	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 29	**Overburden/Waste Rock Area Wind Erosion**
5.126.1	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.126.2	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.126.3	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.126.4	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.126.5	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 30	**Drilling**
5.127.1	Opacity <= 20 percent opacity 6-minute average [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.127.2	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.127.3	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.127.4	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800,

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5.127.5	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 31	**Overburden Loadout**
5.128.1	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.128.2	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.128.3	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.128.4	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.128.5	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 32	**Overburden Unloading (Truck)**
5.129.1	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.129.2	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.129.3	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.129.4	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.129.5	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 33	**Waste Rock Loadout**
5.130.1	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.130.2	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.130.3	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.130.4	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.130.5	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]

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FUGI 34	**Waste Rock Unloading (Truck)**
5.131.1	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.131.2	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.131.3	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.131.4	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.131.5	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 35	**Drop onto Cobber Rejects Pile**
5.132.1	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.132.2	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.132.3	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.132.4	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.132.5	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 36	**Cobber Rejects Pile Wind Erosion**
5.133.1	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.133.2	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.133.3	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.133.4	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.133.5	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 37	**Cobber Rejects Pile Loadout**
5.134.1	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.134.2	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.134.3	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist

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	included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.134.4	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.134.5	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 38	**Cobber Rejects Unloading (Truck)**
5.135.1	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.135.2	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.135.3	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.135.4	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.135.5	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 39	**Cobber Rejects Stockpile Wind Erosion**
5.136.1	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.136.2	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.136.3	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.136.4	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.136.5	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 40	**120K ton Concentrate Stockpile Loading**
5.137.1	The Permittee must control emissions from FUGI 40 using the water sprays TREA 88 whenever FUGI 40 operates. The Permittee must apply water at a rate sufficient to maintain adequate moisture throughout the process and to eliminate visible emissions. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.137.2	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.137.3	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]

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5.137.4	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.137.5	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.137.6	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 41	**120K ton Concentrate Stockpile Wind Erosion**
5.138.1	The Permittee must control emissions from FUGI 41 using the water sprays TREA 89 whenever FUGI 41 operates. The Permittee must apply water at a rate sufficient to maintain adequate moisture throughout the process and to eliminate visible emissions. [Minn. R. 7005.0100, subp. 35a, Minn. R. 7007.0800, subp. 2(A) and 2(B)]
5.138.2	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.138.3	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.138.4	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.138.5	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.138.6	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 42	**120K ton Concentrate Stockpile Loadout**
5.139.1	The Permittee must control emissions from FUGI 42 using the water sprays TREA 90 whenever FUGI 42 operates. The Permittee must apply water at a rate sufficient to maintain adequate moisture throughout the process and to eliminate visible emissions. [Minn. R. 7005.0100, subp. 35a, Minn. R. 7007.0800, subp. 2(A) and 2(B)]
5.139.2	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.139.3	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.139.4	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.139.5	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.139.6	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 84	**Mobile Sources**
5.140.1	The sources in the mobile source fleet affected by the requirements of this subject item are the

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	following mobile sources modeled as part of the visibility demonstration: - diesel-driven haul trucks; - diesel-driven mining shovels; - diesel-driven drilling equipment; - diesel-driven bulldozers; - diesel-driven graders; - diesel-driven railcar movers; - diesel-driven sand and water trucks; - diesel-driven locomotives; and - diesel-driven front-end loaders. [Minn. R. 7007.0800, subp. 2, Minn. Stat. 116.07, subd. 4a(a)]
5.140.2	All diesel-driven mobile sources subject to the requirements of this subject item shall be certified as Tier 4. [Minn. R. 7007.0800, subp. 2, Minn. Stat. 116.07, subd. 4a(a)]
5.140.3	PM < 10 micron <= 70.9 pounds per day 24-hour block average. [Minn. R. 7007.0800, subp. 2, Minn. Stat. 116.07, 4a(a)]
5.140.4	Nitrogen Oxides <= 2525 pounds per day 24-hour block average. [Minn. R. 7007.0800, subp. 2, Minn. Stat. 116.07, subd. 4a(a)]
5.140.5	Sulfur Dioxide <= 3.35 pounds per day 24-hour block average. [Minn. R. 7007.0800, subp. 2, Minn. Stat. 116.07, subd. 4a(a)]
5.140.6	The Permittee shall limit Fuel Usage <= 4.3 million gallons per year 12-month rolling sum for all haul trucks and mining equipment combined. [Minn. R. 7007.0800, subp. 2, Minn. Stat. 116.07, subd. 4a(a)]
5.140.7	The Permittee shall limit Sulfur Content of Fuel <= 15 parts per million and either a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume. [Minn. R. 7007.0800, subp. 2, Minn. Stat. 116.07, subd. 4a(a)]
5.140.8	Fuel Usage: The Permittee shall use only #1 diesel or #2 diesel fuel for the sources in the mobile source fleet. [Minn. R. 7007.0800, subp. 2]
5.140.9	Operating Hours: Daily Recordkeeping: On each day of operation, the Permittee shall record and maintain the total operating hours for each mobile source covered by this subject item for the previous operating day. This shall be based on in-vehicle monitors for each mobile source. For days when a mobile source is not in operation, the Permittee shall record that the mobile source was not in operation that day. [Minn. R. 7007.0800, subps. 4-5, Minn. Stat. 116.07, subd. 4a(a)]
5.140.10	Fuel Usage: Daily Recordkeeping: On each day of operation, the Permittee shall record and maintain the total volume of diesel fuel used in each mobile source covered by this subject item for the previous operating day, as specified in Appendix Q. This shall be based on in-vehicle fuel monitors for each mobile source. For days when a mobile source is not in operation, the Permittee shall record that the mobile source was not in operation that day. The Permittee shall record the time and date that any in-vehicle fuel monitors malfunctions. [Minn. R. 7007.0800, subps. 4-5, Minn. Stat. 116.07, subd. 4a(a)]
5.140.11	Daily Calculations: On each day of operation, the Permittee shall calculate and record the total PM10, NOx, and SO2 emissions for the previous operating day using the daily fuel use and/or daily operating hour records and the procedures and equations in Appendix Q of this permit. The Permittee must calculate emissions using vehicle-specific emission factors provided by the vehicle manufacturer, if available. [Minn. R. 7007.0800, subps. 4-5, Minn. Stat. 116.07, subd. 4a(a)]
5.140.12	Fuel Usage: Monthly Calculations: After the initial startup date of mining operations, by the 15th of the month, the Permittee shall calculate and record the following: - the total diesel fuel use for the previous calendar month using the daily fuel use records; and - the 12-month rolling sum of diesel fuel use for the previous 12-month period by summing the monthly fuel use records for the previous 12 months. [Minn. R. 7007.0800, subp. 4]
5.140.13	Sulfur Content of Fuel: The Permittee shall obtain and maintain a record of the monthly fuel supplier certification for diesel fuel, certifying that the sulfur content does not exceed 15 ppm. [Minn. R. 7007.0800, subps. 4-5]

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5.140.14	The Permittee shall certify that the mobile sources in this subject item were operated and maintained in compliance with the manufacturers recommended maintenance procedures, practices, and schedules. [Minn. R. 7007.0800, subp. 4]
5.140.15	The Permittee shall retain all documents pertaining to purchasing, operations, and required maintenance to certified mobile sources. [Minn. R. 7007.0800, subp. 5]
5.140.16	Upon the acquisition of a mobile source covered by this subject item, the Permittee shall maintain all source-specific manufacturer supplied information that is relevant to emissions calculations including but not limited to fuel use and emission rates. [Minn. R. 7007.0800, subp. 5]
FUGI 85	**Small Limestone and Dolomite Stockpile Wind Erosion**
5.141.1	The Permittee must control emissions from FUGI 85 using the water sprays TREA 162 whenever FUGI 85 operates. The Permittee must apply water at a rate sufficient to maintain adequate moisture throughout the process and to eliminate visible emissions. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.141.2	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.141.3	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.141.4	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.141.5	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.141.6	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 86	**Large Limestone and Dolomite Stockpile Wind Erosion**
5.142.1	The Permittee must control emissions from FUGI 86 using the water sprays TREA 165 whenever FUGI 86 operates. The Permittee must apply water at a rate sufficient to maintain adequate moisture throughout the process and to eliminate visible emissions. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.142.2	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.142.3	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.142.4	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.142.5	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.142.6	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The

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	Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 87	**Ore Stockpile Wind Erosion**
5.143.1	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.143.2	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.143.3	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.143.4	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.143.5	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 88	**Ore Pile Loading**
5.144.1	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.144.2	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.144.3	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.144.4	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.144.5	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 90	**Product Stockpile Loadout**
5.145.1	The Permittee must control emissions from FUGI 90 using the water sprays TREA 168 whenever FUGI 90 operates. The Permittee must apply water at a rate sufficient to maintain adequate moisture throughout the process and to eliminate visible emissions. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.145.2	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.145.3	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.145.4	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.145.5	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.145.6	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine

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	the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 94	**Small Limestone and Dolomite Stockpile Loading**
5.146.1	The Permittee must control emissions from FUGI 94 using the water sprays TREA 161 whenever FUGI 94 operates. The Permittee must apply water at a rate sufficient to maintain adequate moisture throughout the process and to eliminate visible emissions. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.146.2	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.146.3	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.146.4	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.146.5	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.146.6	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 95	**Small Limestone and Dolomite Stockpile Loadout**
5.147.1	The Permittee must control emissions from FUGI 95 using the water sprays TREA 160 whenever FUGI 95 operates. The Permittee must apply water at a rate sufficient to maintain adequate moisture throughout the process and to eliminate visible emissions. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.147.2	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.147.3	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.147.4	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.147.5	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.147.6	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 96	**Large Limestone and Dolomite Stockpile Loading**
5.148.1	The Permittee must control emissions from FUGI 96 using the water sprays TREA 164 whenever FUGI 96 operates. The Permittee must apply water at a rate sufficient to maintain adequate moisture throughout the process and to eliminate visible emissions.

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	This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.148.2	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.148.3	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.148.4	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.148.5	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.148.6	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 97	**Large Limestone and Dolomite Stockpile Loadout**
5.149.1	The Permittee must control emissions from FUGI 97 using the water sprays TREA 163 whenever FUGI 97 operates. The Permittee must apply water at a rate sufficient to maintain adequate moisture throughout the process and to eliminate visible emissions. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.149.2	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.149.3	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.149.4	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.149.5	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.149.6	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 98	**Emergency Product Conveyor from Pellet Discharge**
5.150.1	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.150.2	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.150.3	The Permittee shall only operate FUGI 98 during an emergency situation. [Stage 1]. [Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.150.4	The Permittee shall record each instance when FUGI 98 operates. The Permittee shall document the date and length of operation in the semiannual deviation report required by Minn. R. 7007.0800, subp. 6(A)(2) elsewhere in this permit. Proper operation of FUGI 98 during an emergency is itself not necessarily a deviation. [Minn. R. 7007.0800, subps. 5&6]

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5.150.5	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.150.6	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.150.7	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 99	**Product Stockpile Conveyor**
5.151.1	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.151.2	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.151.3	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.151.4	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.151.5	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 100	**In-pit Haul Roads Emissions**
5.152.1	The Permittee must follow the procedures specified in the Fugitive Dust Control Plan in Appendix I of this permit to control emissions from FUGI 100. The Permittee must apply water to the haul roads at the levels determined by the methods within the Fugitive Dust Control Plan and must maintain all records specified therein. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A) & 2(B), Minn. Stat. 116.07, subd. 4a(a), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.152.2	The Permittee must follow the procedures specified in the Fugitive Dust Control Plan in Appendix I of this permit to control emissions from FUGI 100. The Permittee must apply water to the haul roads at the levels determined by the methods within the Fugitive Dust Control Plan and must maintain all records specified therein. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4300, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(B)]
5.152.3	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.152.4	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.152.5	Daily Recordkeeping: On each day of mining operation, the Permittee must determine the if watering is required and the daily minimum watering intensity as determined by the procedures specified by the Fugitive Dust Control Plan in Appendix I of the permit, the actual amount of water applied by the Permittee, and if the Permittee met the daily minimum watering intensity. Any failures to meet the daily minimum watering intensity are considered deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR

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	52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.152.6	Monthly Recordkeeping: By the 15th of the month, the Permittee must calculate and record the following: - The number of days watering was required and the number of days that the Permittee did not meet the daily minimum watering intensities for the previous calendar month; - The total number of days watering was required and the total number of days that the Permittee did not meet the daily minimum watering intensities for the ongoing semi-annual reporting period (January 1 through June 30 or July 1 through December 31); - The percentage of days watering was required that the Permittee did not meet the daily minimum watering intensity for the ongoing semi-annual reporting period. [Minn. R. 7007.0800, subps. 4-5]
5.152.7	If the percentage of days watering was required that the Permittee did not meet the daily minimum watering intensity for a semi-annual reporting period is equal to or greater than 3%, the Permittee must conduct a root cause analysis to determine of the cause(s) of the deviations, document any corrective actions taken, and identify procedures to avoid future deviations. The results of this analysis must be included with the semiannual deviations report required by Minn. R. 7007.0800, subp. 6(A)(2). [Stage 1]. [Minn. R. 7007.0800, subp. 16(L), Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. Stat. 116.07, subd. 4a(a), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
5.152.8	The Permittee must submit an annual report by the 31st of January after the initial startup date of mining operations. The report shall document the percentage of days watering was required that the Permittee did not meet the daily minimum watering intensity for the semi-annual reporting periods. The report shall be submitted with the annual Compliance Certification required by this permit. [Minn. R. 7007.0800, subp. 16(L)]
5.152.9	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.152.10	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.152.11	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
FUGI 101	**Blasting**
5.153.1	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]
5.153.2	Comply with Fugitive Emission Control Plan: The Permittee shall follow the actions and recordkeeping specified in the fugitive dust control plan in Appendix I of this permit. If the Commissioner determines the Permittee is out of compliance with Minn. R. 7011.0150 or the fugitive control plan, then the Permittee may be required to amend the control plan and/or to install and operate particulate matter ambient monitors as requested by the Commissioner. [Minn. R. 7007.0800, subp. 2(A), Minn. R. 7009.0020, Minn. R. 7011.0150, Minn. Stat. 116.07, subd. 4a(a)]
5.153.3	The Permittee must maintain a current copy of the Fugitive Dust Control Plan onsite and it must be available for inspection upon request. The Permittee must keep the plan for the life of facility. [Minn. R. 7007.0800, subp. 2(A) & (B)]
FUGI 184	**Ore Stockpile Loadout**
5.154.1	Opacity <= 5 percent opacity 6-minute average. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.154.2	Opacity <= 20 percent opacity. [Minn. R. 7011.0110]

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5.154.3	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day during daylight hours. [Minn. R. 7007.0800, subp. 4]
5.154.4	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.154.5	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
STRU 93	**Primary Crusher Building**
5.155.1	The Permittee shall capture emissions from EQUI 262 with the enclosure STRU 93 and vent these emissions to control equipment meeting the requirements of TREA 120 whenever EQUI 262 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.155.2	Once per operating day, the Permittee shall inspect all flaps that serve the purpose of closing off the ore dump and initiate repair of any and all flaps damaged beyond normal wear and tear within 24 hours of discovery of damage. [Minn. R. 7007.0800, subp. 4]
5.155.3	The Permittee shall record the time and date of each flap inspection and whether or not the Permittee observed any damaged flaps. If the Permittee observed damaged flaps, the Permittee shall also record a brief description of the corrective action taken and the date the action was taken. [Minn. R. 7007.0800, subp. 5]
5.155.4	The Permittee shall post signs on all non-alarmed doors and windows leading to the outside except those that are necessary for operation of EQUI 262 that state that the doors and windows must remain closed while the facility is in operation. The Permittee shall conduct inspections at least once each calendar week to determine if the doors and windows are closed as required by this permit. The Permittee shall maintain a written record of the inspections and any corrective action taken. [Minn. R. 7007.0800, subps. 4-5]
5.155.5	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours from STRU 93 while EQUI 262 is in operation. [Minn. R. 7007.0800, subp. 4]
5.155.6	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.155.7	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
STRU 94	**Fine Ore Storage Barn**
5.156.1	The Permittee shall capture emissions from EQUI 141 and EQUI 264 with the enclosure STRU 94 and vent these emissions to control equipment meeting the requirements of TREA 5 whenever EQUI 141 or EQUI 264 operate. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.156.2	The Permittee shall post signs on all non-alarmed doors and windows leading to the outside except those that are necessary for the operation of EQUI 141 and EQUI 264 that state that the doors and windows must remain closed while the facility is in operation. The Permittee shall conduct inspections at least once each calendar week to determine if the doors

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	and windows are closed as required by this permit. The Permittee shall maintain a written record of the inspections and any corrective action taken. [Minn. R. 7007.0800, subps. 4-5]
5.156.3	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours from STRU 94 while EQUI 141 and EQUI 264 are in operation. [Minn. R. 7007.0800, subp. 4]
5.156.4	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.156.5	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
STRU 118	**Coarse Ore Storage Barn**
5.157.1	The Permittee shall capture emissions from EQUI 140 and EQUI 263 with the enclosure STRU 118 and vent these emissions to control equipment meeting the requirements of TREA 4 whenever EQUI 140 or EQUI 263 operate. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.157.2	The Permittee shall post signs on all non-alarmed doors and windows leading to the outside except those that are necessary for the operation of EQUI 140 and EQUI 263 that state that the doors and windows must remain closed while the facility is in operation. The Permittee shall conduct inspections at least once each calendar week to determine if the doors and windows are closed as required by this permit. The Permittee shall maintain a written record of the inspections and any corrective action taken. [Minn. R. 7007.0800, subps. 4-5]
5.157.3	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours from STRU 118 while EQUI 140 and EQUI 263 are in operation. [Minn. R. 7007.0800, subp. 4]
5.157.4	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.157.5	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
STRU 202	**Pellet Loadout Building**
5.158.1	The Permittee shall capture emissions from EQUI 376 with the total enclosure STRU 202 and vent these emissions to control equipment meeting the requirements of TREA 170 whenever EQUI 376 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.158.2	Air Flow Rate >= 200 feet per minute (average face velocity) through all natural draft openings in STRU 202. The direction of airflow through all natural draft openings shall be into the building. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.158.3	Any natural draft opening shall be at least four equivalent opening diameters from each particulate matter emission point. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.158.4	The total area of all natural draft openings shall not exceed 5 percent of the surface area of the building's walls, floor, and ceiling. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.158.5	All access doors and windows whose areas are not included in the natural draft opening area calculation and are not included in the face velocity calculation shall be closed during routine

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	operation of the process. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.158.6	The Permittee shall not make any changes to natural draft openings in the building that would cause: - any natural draft opening to be closer than four equivalent opening diameters from any emissions point; or - the total area of all natural draft openings to exceed five percent of the total surface area of the enclosure. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.158.7	The Permittee shall maintain records of any changes made to emission points or natural draft openings and records showing that the enclosure will comply with EPA Reference Method 204 after the changes. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.158.8	The Permittee shall post signs on all non-alarmed doors and windows leading to the outside that state that the doors and windows must remain closed while the facility is in operation except for normal access and egress. The Permittee shall conduct inspections at least once each calendar week to determine if the doors and windows are closed as required by this permit. The Permittee shall maintain a written record of the inspections and any corrective action taken. [Minn. R. 7007.0800, subp. 2]
5.158.9	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours from STRU 202 while EQUI 376 is in operation. [Minn. R. 7007.0800, subp. 4]
5.158.10	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.158.11	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
5.158.12	Enclosure Certification and Evaluation: The Permittee shall maintain the most current record of the enclosure evaluation and certification on site. The control device enclosure must be evaluated by a testing company, must conform to the design and operating requirements listed in EPA Reference Method 204 for a permanent total enclosure, and must maintain the minimum face velocity as required by this permit. The enclosure certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall document on a form provided by the commissioner that the enclosure conforms to the design and operating practices specified in EPA Reference Method 204 for a permanent total enclosure. The certification shall be sent to the commissioner within 180 days after start-up of TREA 170. The form used to demonstrate that the enclosure conforms to the required design and operating practices shall contain the elements listed EPA Reference Method 204 for a permanent total enclosure and include a certification statement signed by the responsible official, stating as follows: "I certify under penalty of law that the aforementioned enclosure(s) has (have) been evaluated under my direction or supervision by qualified personnel and that, to the best of my knowledge and belief, the (each) enclosure conforms to the design and operating practices specified in EPA Reference Method 204." [Stage 1]. [Minn. R. 7007.0800, subp. 2, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.158.13	Annual Enclosure Evaluation: The Permittee shall measure and record at least once every 12 months the average face velocity through all natural draft openings in STRU 202 and the criteria specified in EPA Reference Method 204 for a permanent total enclosure that were measured during the most recent enclosure certification to verify the enclosure design and operation parameters meet or exceed the parameters measured during the most recent enclosure evaluation conducted according to this permit. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I

Requirement number	Requirement and citation
	Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
STRU 206	**Additive Grinding Stone Storage Bin**
5.159.1	The Permittee shall capture emissions from EQUI 294 with the total enclosure STRU 206 and vent these emissions to control equipment meeting the requirements of TREA 123 whenever EQUI 294 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.159.2	Air Flow Rate >= 200 feet per minute (average face velocity) through all natural draft openings in STRU 206. The direction of airflow through all natural draft openings shall be into the building. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.159.3	Any natural draft opening shall be at least four equivalent opening diameters from each particulate matter emission point. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.159.4	The total area of all natural draft openings shall not exceed 5 percent of the surface area of the building's walls, floor, and ceiling. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.159.5	All access doors and windows whose areas are not included in the natural draft opening area calculation and are not included in the face velocity calculation shall be closed during routine operation of the process. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.159.6	The Permittee shall not make any changes to natural draft openings in the building that would cause: - any natural draft opening to be closer than four equivalent opening diameters from any emissions point; or - the total area of all natural draft openings to exceed five percent of the total surface area of the enclosure. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.159.7	The Permittee shall maintain records of any changes made to emission points or natural draft openings and records showing that the enclosure will comply with EPA Reference Method 204 after the changes. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.159.8	The Permittee shall post signs on all non-alarmed doors and windows leading to the outside that state that the doors and windows must remain closed while the facility is in operation except for normal access and egress. The Permittee shall conduct inspections at least once each calendar week to determine if the doors and windows are closed as required by this permit. The Permittee shall maintain a written record of the inspections and any corrective action taken. [Minn. R. 7007.0800, subp. 2]
5.159.9	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours from STRU 206 while EQUI 294 is in operation. [Minn. R. 7007.0800, subp. 4]
5.159.10	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.159.11	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]

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5.159.12	Enclosure Certification and Evaluation: The Permittee shall maintain the most current record of the enclosure evaluation and certification on site. The control device enclosure must be evaluated by a testing company, must conform to the design and operating requirements listed in EPA Reference Method 204 for a permanent total enclosure, and must maintain the minimum face velocity as required by this permit. The enclosure certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall document on a form provided by the commissioner that the enclosure conforms to the design and operating practices specified in EPA Reference Method 204 for a permanent total enclosure. The certification shall be sent to the commissioner within 180 days after start-up of TREA 123. The form used to demonstrate that the enclosure conforms to the required design and operating practices shall contain the elements listed EPA Reference Method 204 for a permanent total enclosure and include a certification statement signed by the responsible official, stating as follows: "I certify under penalty of law that the aforementioned enclosure(s) has (have) been evaluated under my direction or supervision by qualified personnel and that, to the best of my knowledge and belief, the (each) enclosure conforms to the design and operating practices specified in EPA Reference Method 204." [Stage 1]. [Minn. R. 7007.0800, subp. 2, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.159.13	Annual Enclosure Evaluation: The Permittee shall measure and record at least once every 12 months the average face velocity through all natural draft openings in STRU 206 and the criteria specified in EPA Reference Method 204 for a permanent total enclosure that were measured during the most recent enclosure certification to verify the enclosure design and operation parameters meet or exceed the parameters measured during the most recent enclosure evaluation conducted according to this permit. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
STRU 208	**Overland Conveyor Building**
5.160.1	The Permittee shall capture emissions from EQUI 298 with the total enclosure STRU 208 and vent these emissions to control equipment meeting the requirements of TREA 127 whenever EQUI 298 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.160.2	Air Flow Rate >= 200 feet per minute (average face velocity) through all natural draft openings in STRU 208. The direction of airflow through all natural draft openings shall be into the building. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.160.3	Any natural draft opening shall be at least four equivalent opening diameters from each particulate matter emission point. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.160.4	The total area of all natural draft openings shall not exceed 5 percent of the surface area of the building's walls, floor, and ceiling. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.160.5	All access doors and windows whose areas are not included in the natural draft opening area calculation and are not included in the face velocity calculation shall be closed during routine operation of the process. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.160.6	The Permittee shall not make any changes to natural draft openings in the building that would cause: - any natural draft opening to be closer than four equivalent opening diameters from any emissions point; or - the total area of all natural draft openings to exceed five percent of the total surface area of the

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	enclosure. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.160.7	The Permittee shall maintain records of any changes made to emission points or natural draft openings and records showing that the enclosure will comply with EPA Reference Method 204 after the changes. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.160.8	The Permittee shall post signs on all non-alarmed doors and windows leading to the outside that state that the doors and windows must remain closed while the facility is in operation except for normal access and egress. The Permittee shall conduct inspections at least once each calendar week to determine if the doors and windows are closed as required by this permit. The Permittee shall maintain a written record of the inspections and any corrective action taken. [Minn. R. 7007.0800, subp. 2]
5.160.9	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours from STRU 208 while EQUI 298 is in operation. [Minn. R. 7007.0800, subp. 4]
5.160.10	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.160.11	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
5.160.12	Enclosure Certification and Evaluation: The Permittee shall maintain the most current record of the enclosure evaluation and certification on site. The control device enclosure must be evaluated by a testing company, must conform to the design and operating requirements listed in EPA Reference Method 204 for a permanent total enclosure, and must maintain the minimum face velocity as required by this permit. The enclosure certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall document on a form provided by the commissioner that the enclosure conforms to the design and operating practices specified in EPA Reference Method 204 for a permanent total enclosure. The certification shall be sent to the commissioner within 180 days after start-up of TREA 127. The form used to demonstrate that the enclosure conforms to the required design and operating practices shall contain the elements listed EPA Reference Method 204 for a permanent total enclosure and include a certification statement signed by the responsible official, stating as follows: "I certify under penalty of law that the aforementioned enclosure(s) has (have) been evaluated under my direction or supervision by qualified personnel and that, to the best of my knowledge and belief, the (each) enclosure conforms to the design and operating practices specified in EPA Reference Method 204." [Stage 1]. [Minn. R. 7007.0800, subp. 2, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.160.13	Annual Enclosure Evaluation: The Permittee shall measure and record at least once every 12 months the average face velocity through all natural draft openings in STRU 208 and the criteria specified in EPA Reference Method 204 for a permanent total enclosure that were measured during the most recent enclosure certification to verify the enclosure design and operation parameters meet or exceed the parameters measured during the most recent enclosure evaluation conducted according to this permit. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
STRU 209	**Train Unloading Conveyor Building**

Requirement number	Requirement and citation
5.161.1	The Permittee shall capture emissions from EQUI 297 with the total enclosure STRU 209 and vent these emissions to control equipment meeting the requirements of TREA 126 whenever EQUI 297 operates. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.161.2	Air Flow Rate >= 200 feet per minute (average face velocity) through all natural draft openings in STRU 209. The direction of airflow through all natural draft openings shall be into the building. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.161.3	Any natural draft opening shall be at least four equivalent opening diameters from each particulate matter emission point. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.161.4	The total area of all natural draft openings shall not exceed 5 percent of the surface area of the building's walls, floor, and ceiling. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.161.5	All access doors and windows whose areas are not included in the natural draft opening area calculation and are not included in the face velocity calculation shall be closed during routine operation of the process. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.161.6	The Permittee shall not make any changes to natural draft openings in the building that would cause: - any natural draft opening to be closer than four equivalent opening diameters from any emissions point; or - the total area of all natural draft openings to exceed five percent of the total surface area of the enclosure. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.161.7	The Permittee shall maintain records of any changes made to emission points or natural draft openings and records showing that the enclosure will comply with EPA Reference Method 204 after the changes. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.161.8	The Permittee shall post signs on all non-alarmed doors and windows leading to the outside that state that the doors and windows must remain closed while the facility is in operation except for normal access and egress. The Permittee shall conduct inspections at least once each calendar week to determine if the doors and windows are closed as required by this permit. The Permittee shall maintain a written record of the inspections and any corrective action taken. [Minn. R. 7007.0800, subp. 2]
5.161.9	Visible Emissions: The Permittee shall check for visible emissions, using the Visible Emissions Checklist included in Appendix D of this permit, once each day of operation during daylight hours from STRU 209 while EQUI 297 is in operation. [Minn. R. 7007.0800, subp. 4]
5.161.10	Visible Emissions: Recordkeeping: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed. [Minn. R. 7007.0800, subp. 2]
5.161.11	Visible Emissions: Corrective Action: If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the visible emissions. The Permittee shall keep a record of the type and date of all corrective actions taken. [Minn. R. 7007.0800, subp. 5]
5.161.12	Enclosure Certification and Evaluation: The Permittee shall maintain the most current record of the enclosure evaluation and certification on site. The control device enclosure must be evaluated by a

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	testing company, must conform to the design and operating requirements listed in EPA Reference Method 204 for a permanent total enclosure, and must maintain the minimum face velocity as required by this permit. The enclosure certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall document on a form provided by the commissioner that the enclosure conforms to the design and operating practices specified in EPA Reference Method 204 for a permanent total enclosure. The certification shall be sent to the commissioner within 180 days after start-up of TREA 126. The form used to demonstrate that the enclosure conforms to the required design and operating practices shall contain the elements listed EPA Reference Method 204 for a permanent total enclosure and include a certification statement signed by the responsible official, stating as follows: "I certify under penalty of law that the aforementioned enclosure(s) has (have) been evaluated under my direction or supervision by qualified personnel and that, to the best of my knowledge and belief, the (each) enclosure conforms to the design and operating practices specified in EPA Reference Method 204." [Stage 1]. [Minn. R. 7007.0800, subp. 2, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.161.13	Annual Enclosure Evaluation: The Permittee shall measure and record at least once every 12 months the average face velocity through all natural draft openings in STRU 209 and the criteria specified in EPA Reference Method 204 for a permanent total enclosure that were measured during the most recent enclosure certification to verify the enclosure design and operation parameters meet or exceed the parameters measured during the most recent enclosure evaluation conducted according to this permit. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
TREA 1	**Grizzly Scalping Screen Baghouse**
5.162.1	The Permittee must vent emissions from EQUI 132 to TREA 1 whenever EQUI 132 operates and operate and maintain TREA 1 at all times that any emissions are vented to TREA 1. The Permittee must document periods of non-operation of the control equipment TREA 1 whenever EQUI 132 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.162.2	The Permittee must vent emissions from EQUI 132 to TREA 1 whenever EQUI 132 operates and operate and maintain TREA 1 at all times that any emissions are vented to TREA 1. The Permittee must document periods of non-operation of the control equipment TREA 1 whenever EQUI 132 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.162.3	If the Permittee replaces TREA 1, the replacement control must meet or exceed the control efficiency requirements of TREA 1 as well as comply with all other requirements of TREA 1. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.162.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change.

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	If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.162.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.162.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.162.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.162.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.162.9	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.162.10	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.162.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.162.12	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.162.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition:

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	Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.162.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.162.15	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.162.16	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.162.17	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.162.18	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 4	**Coarse Ore Storage Conveyor Baghouse**

Requirement number	Requirement and citation
5.163.1	The Permittee must vent emissions from EQUI 140 and EQUI 263 to TREA 4 whenever EQUI 140 and EQUI 263 operate and operate and maintain TREA 4 at all times that any emissions are vented to TREA 4. The Permittee must document periods of non-operation of the control equipment TREA 4 whenever EQUI 140 and EQUI 263 are operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.163.2	The Permittee must vent emissions from EQUI 140 and EQUI 263 to TREA 4 whenever EQUI 140 and EQUI 263 operate and operate and maintain TREA 4 at all times that any emissions are vented to TREA 4. The Permittee must document periods of non-operation of the control equipment TREA 4 whenever EQUI 140 and EQUI 263 are operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.163.3	If the Permittee replaces TREA 4, the replacement control must meet or exceed the control efficiency requirements of TREA 4 as well as comply with all other requirements of TREA 4. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.163.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [Title I Condition: 40 CFR 52.21(J)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.163.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.163.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.163.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.163.8	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or

Requirement number	Requirement and citation
	- the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]
5.163.9	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]
5.163.10	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.163.11	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.163.12	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.163.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.163.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.163.15	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b);

Requirement number	Requirement and citation
	40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 5	**Fine Ore Storage Conveyor Baghouse**
5.164.1	The Permittee must vent emissions from EQUI 141 and EQUI 264 to TREA 5 whenever EQUI 141 and EQUI 264 operate and operate and maintain TREA 5 at all times that any emissions are vented to TREA 5. The Permittee must document periods of non-operation of the control equipment TREA 5 whenever EQUI 141 and EQUI 264 are operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.164.2	The Permittee must vent emissions from EQUI 141 and EQUI 264 to TREA 5 whenever EQUI 141 and EQUI 264 operate and operate and maintain TREA 5 at all times that any emissions are vented to TREA 5. The Permittee must document periods of non-operation of the control equipment TREA 5 whenever EQUI 141 and EQUI 264 are operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.164.3	If the Permittee replaces TREA 5, the replacement control must meet or exceed the control efficiency requirements of TREA 5 as well as comply with all other requirements of TREA 5. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.164.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.164.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.164.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) &

Requirement number	Requirement and citation
	Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.164.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.164.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.164.9	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.164.10	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.164.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.164.12	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.164.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.164.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]

Requirement number	Requirement and citation
5.164.15	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.164.16	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.164.17	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.164.18	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 6	**Fine Ore Mill Bay Tunnel 1A Baghouse**
5.165.1	The Permittee must vent emissions from EQUI 111 to TREA 6 whenever EQUI 111 operates and operate and maintain TREA 6 at all times that any emissions are vented to TREA 6. The Permittee must document periods of non-operation of the control equipment TREA 6 whenever EQUI 111 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.165.2	The Permittee must vent emissions from EQUI 111 to TREA 6 whenever EQUI 111 operates and operate and maintain TREA 6 at all times that any emissions are vented to TREA 6. The Permittee must document periods of non-operation of the control equipment TREA 6 whenever EQUI 111 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency

Requirement number	Requirement and citation
	(EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.165.3	If the Permittee replaces TREA 6, the replacement control must meet or exceed the control efficiency requirements of TREA 6 as well as comply with all other requirements of TREA 6. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.165.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.165.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.165.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.165.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.165.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.165.9	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.165.10	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.165.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]

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5.165.12	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.165.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.165.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.165.15	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.165.16	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.165.17	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.165.18	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8);

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	40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 9	**Bentonite Unloading Baghouse 1**
5.166.1	The Permittee must vent emissions from EQUI 340 to TREA 9 whenever EQUI 340 operates and operate and maintain TREA 9 at all times that any emissions are vented to TREA 9. The Permittee must document periods of non-operation of the control equipment TREA 9 whenever EQUI 340 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.166.2	The Permittee must vent emissions from EQUI 340 to TREA 9 whenever EQUI 340 operates and operate and maintain TREA 9 at all times that any emissions are vented to TREA 9. The Permittee must document periods of non-operation of the control equipment TREA 9 whenever EQUI 340 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.166.3	If the Permittee replaces TREA 9, the replacement control must meet or exceed the control efficiency requirements of TREA 9 as well as comply with all other requirements of TREA 9. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.166.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.166.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use

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	by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.166.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.166.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.166.8	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]
5.166.9	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]
5.166.10	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.166.11	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.166.12	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
TREA 10	**Bentonite Receiving Bin 2 Bin Vent**
5.167.1	The Permittee must vent emissions from EQUI 342 to TREA 10 whenever EQUI 342 operates and operate and maintain TREA 10 at all times that any emissions are vented to TREA 10. The Permittee must document periods of non-operation of the control equipment TREA 10 whenever EQUI 342 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.167.2	The Permittee must vent emissions from EQUI 342 to TREA 10 whenever EQUI 342 operates and operate and maintain TREA 10 at all times that any emissions are vented to TREA 10. The Permittee must document periods of non-operation of the control equipment TREA 10 whenever EQUI 342 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to

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	avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.167.3	If the Permittee replaces TREA 10, the replacement control must meet or exceed the control efficiency requirements of TREA 10 as well as comply with all other requirements of TREA 10. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.167.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.167.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.167.6	The Permittee shall maintain and operate a pressure drop monitoring device that continuously indicates and records the pressure drop across the baghouse. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.167.7	The Permittee shall maintain a continuous hard copy readout or computer disk file of the pressure drop readings. Readings outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.167.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.167.9	The Permittee shall calibrate the pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.167.10	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.167.11	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee

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	shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.167.12	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.167.13	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.167.14	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
TREA 11	**Hearth Layer Baghouse**
5.168.1	The Permittee must vent emissions from EQUI 114, EQUI 124, and EQUI 135 to TREA 11 whenever EQUI 114, EQUI 124, or EQUI 135 operates, and operate and maintain TREA 11 at all times that any emissions are vented to TREA 11. The Permittee must document periods of non-operation of the control equipment TREA 11 whenever EQUI 114, EQUI 124, or EQUI 135 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.168.2	The Permittee must vent emissions from EQUI 114, EQUI 124, and EQUI 135 to TREA 11 whenever EQUI 114, EQUI 124, or EQUI 135 operates, and operate and maintain TREA 11 at all times that any emissions are vented to TREA 11. The Permittee must document periods of non-operation of the control equipment TREA 11 whenever EQUI 114, EQUI 124, or EQUI 135 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.168.3	If the Permittee replaces TREA 11, the replacement control must meet or exceed the control efficiency requirements of TREA 11 as well as comply with all other requirements of TREA 11. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.168.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be

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	considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.168.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.168.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.168.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.168.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.168.9	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.168.10	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.168.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.168.12	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.168.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]

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5.168.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.168.15	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.168.16	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.168.17	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.168.18	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 13	**Indurating Furnace Hood Exhaust Baghouse**
5.169.1	The Permittee must vent emissions from EQUI 257 to TREA 13 whenever EQUI 257 operates and

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	operate and maintain TREA 13 at all times that any emissions are vented to TREA 13. The Permittee must document periods of non-operation of the control equipment TREA 13 whenever EQUI 257 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.169.2	If the Permittee replaces TREA 13, the replacement control must meet or exceed the control efficiency requirements of TREA 13 as well as comply with all other requirements of TREA 13. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.169.3	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. The Permittee shall record the pressure drop at least once every 24 hours. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.169.4	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.169.5	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.169.6	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.169.7	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.169.8	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.169.9	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.169.10	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.169.11	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur:

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	- the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.169.12	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.169.13	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.169.14	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.169.15	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 14	**Indurating Furnace Waste Gas Multiclone 1**
5.170.1	The Permittee must vent emissions from EQUI 258 to TREA 14 whenever 258 operates, and operate and maintain TREA 14 at all times that any emissions are vented to TREA 14. The Permittee must

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	document periods of non-operation of the control equipment TREA 14 whenever EQUI 258 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.170.2	If the Permittee replaces TREA 14, the replacement control must meet or exceed the control efficiency requirements of TREA 14 as well as comply with all other requirements of TREA 14. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.170.3	The Permittee shall operate and maintain the cyclone in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.170.4	The Permittee shall maintain and operate a pressure drop monitoring device that continuously indicates and records the pressure drop across the multiclone. The recording device shall also calculate the three-hour rolling average pressure drop. [40 CFR 64.3(b)(ii), Minn. R. 7017.0200]
5.170.5	The Permittee shall maintain a continuous hard copy readout or computer disk file of the pressure drop readings. Readings outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.170.6	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.170.7	Annual Calibration: The Permittee shall calibrate the pressure drop monitor at least once every 12 months and shall maintain a written record of the calibration and any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.170.8	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.170.9	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the recorded pressure drop is outside the required operating range; or - the multiclone or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the multiclone. The Permittee shall keep a record of the type and date of any corrective action taken for each control device. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.170.10	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.170.11	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions

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	or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.170.12	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.170.13	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9590(b)(8); 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (3); 40 CFR 63.9610(a) & (b); 40 CFR 63.9622(e) & (f); 40 CFR 63.9623(b)(5); 40 CFR 63.9623(c); 40 CFR 63.9625; 40 CFR 63.9631(i); 40 CFR 63.9632(b)-(e); 40 CFR 63.9633; 40 CFR 63.9634(a), (k), & (l); 40 CFR 63.9636(a)(1) & (3); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 15	**Indurating Furnace Waste Gas Baghouse 1**
5.171.1	The Permittee must vent emissions from EQUI 258 to TREA 15 whenever EQUI 258 operates and operate and maintain TREA 15 at all times that any emissions are vented to TREA 15. The Permittee must document periods of non-operation of the control equipment TREA 15 whenever EQUI 258 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.171.2	If the Permittee replaces TREA 15, the replacement control must meet or exceed the control efficiency requirements of TREA 15 as well as comply with all other requirements of TREA 15. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.171.3	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the

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	Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. The Permittee shall record the pressure drop at least once every 24 hours. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.171.4	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.171.5	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.171.6	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.171.7	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.171.8	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.171.9	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.171.10	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.171.11	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.171.12	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.171.13	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or

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	the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.171.14	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.171.15	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 16	**Pellet Discharge Baghouse**
5.172.1	The Permittee must vent emissions from EQUI 127 and EQUI 135 to TREA 16 whenever EQUI 127 and EQUI 135 operate and operate and maintain TREA 16 at all times that any emissions are vented to TREA 16. The Permittee must document periods of non-operation of the control equipment TREA 16 whenever EQUI 127 and EQUI 135 are operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.172.2	The Permittee must vent emissions from EQUI 127 and EQUI 135 to TREA 16 whenever EQUI 127 and EQUI 135 operate and operate and maintain TREA 16 at all times that any emissions are vented to TREA 16. The Permittee must document periods of non-operation of the control equipment TREA 16 whenever EQUI 127 and EQUI 135 are operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.172.3	If the Permittee replaces TREA 16, the replacement control must meet or exceed the control efficiency requirements of TREA 16 as well as comply with all other requirements of TREA 16. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as

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	applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.172.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.172.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.172.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.172.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.172.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.172.9	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.172.10	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.172.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.172.12	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or

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	- the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.172.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.172.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.172.15	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.172.16	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.172.17	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.172.18	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2);

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	40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 17	**Hearth Layer Separation Baghouse**
5.173.1	The Permittee must vent emissions from EQUI 135 and EQUI 259 to TREA 17 whenever EQUI 135 and EQUI 259 operate and operate and maintain TREA 17 at all times that any emissions are vented to TREA 17. The Permittee must document periods of non-operation of the control equipment TREA 17 whenever EQUI 135 and EQUI 259 are operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.173.2	The Permittee must vent emissions from EQUI 135 and EQUI 259 to TREA 17 whenever EQUI 135 and EQUI 259 operate and operate and maintain TREA 17 at all times that any emissions are vented to TREA 17. The Permittee must document periods of non-operation of the control equipment TREA 17 whenever EQUI 135 and EQUI 259 are operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.173.3	If the Permittee replaces TREA 17, the replacement control must meet or exceed the control efficiency requirements of TREA 17 as well as comply with all other requirements of TREA 17. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.173.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.173.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]

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5.173.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.173.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.173.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.173.9	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.173.10	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.173.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.173.12	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.173.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.173.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R.

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	7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.173.15	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.173.16	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.173.17	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.173.18	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 18	**Product Junction House 1 Baghouse**
5.174.1	The Permittee must vent emissions from EQUI 330 to TREA 18 whenever EQUI 330 operates and operate and maintain TREA 18 at all times that any emissions are vented to TREA 18. The Permittee must document periods of non-operation of the control equipment TREA 18 whenever EQUI 330 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.174.2	The Permittee must vent emissions from EQUI 330 to TREA 18 whenever EQUI 330 operates and operate and maintain TREA 18 at all times that any emissions are vented to TREA 18. The Permittee must document periods of non-operation of the control equipment TREA 18 whenever EQUI 330 is

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	operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.174.3	If the Permittee replaces TREA 18, the replacement control must meet or exceed the control efficiency requirements of TREA 18 as well as comply with all other requirements of TREA 18. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.174.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.174.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.174.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.174.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.174.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.174.9	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.174.10	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]

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5.174.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.174.12	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.174.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.174.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.174.15	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.174.16	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.174.17	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.174.18	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2);

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	40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 19	**Product Junction House 4 Baghouse**
5.175.1	The Permittee must vent emissions from EQUI 331 and EQUI 347 to TREA 19 whenever EQUI 331 or EQUI 347 operates, and operate and maintain TREA 19 at all times that any emissions are vented to TREA 19. The Permittee must document periods of non-operation of the control equipment TREA 19 whenever EQUI 331 or EQUI 347 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.175.2	The Permittee must vent emissions from EQUI 331 and EQUI 347 to TREA 19 whenever EQUI 331 or EQUI 347 operates and operate and maintain TREA 19 at all times that any emissions are vented to TREA 19. The Permittee must document periods of non-operation of the control equipment TREA 19 whenever EQUI 331 or EQUI 347 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.175.3	If the Permittee replaces TREA 19, the replacement control must meet or exceed the control efficiency requirements of TREA 19 as well as comply with all other requirements of TREA 19. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.175.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be

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	considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.175.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.175.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.175.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.175.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.175.9	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.175.10	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.175.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.175.12	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.175.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]

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5.175.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.175.15	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.175.16	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.175.17	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.175.18	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 42	**Secondary Crusher Line 1 Baghouse**
5.176.1	The Permittee must vent emissions from EQUI 253 and EQUI 343 to TREA 42 whenever EQUI 253 and

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	EQUI 343 operate and operate and maintain TREA 42 at all times that any emissions are vented to TREA 42. The Permittee must document periods of non-operation of the control equipment TREA 42 whenever EQUI 253 and EQUI 343 are operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.176.2	The Permittee must vent emissions from EQUI 253 and EQUI 343 to TREA 42 whenever EQUI 253 and EQUI 343 operate and operate and maintain TREA 42 at all times that any emissions are vented to TREA 42. The Permittee must document periods of non-operation of the control equipment TREA 42 whenever EQUI 253 and EQUI 343 are operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.176.3	If the Permittee replaces TREA 42, the replacement control must meet or exceed the control efficiency requirements of TREA 42 as well as comply with all other requirements of TREA 42. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.176.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.176.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.176.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.176.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.176.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]

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5.176.9	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.176.10	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.176.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.176.12	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.176.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.176.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.176.15	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.176.16	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]

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5.176.17	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.176.18	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 43	**Cobber Rejects Transfer Tower Baghouse**
5.177.1	The Permittee must vent emissions from EQUI 252 to TREA 43 whenever EQUI 252 operates and operate and maintain TREA 43 at all times that any emissions are vented to TREA 43. The Permittee must document periods of non-operation of the control equipment TREA 43 whenever EQUI 252 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.177.2	The Permittee must vent emissions from EQUI 252 to TREA 43 whenever EQUI 252 operates and operate and maintain TREA 43 at all times that any emissions are vented to TREA 43. The Permittee must document periods of non-operation of the control equipment TREA 43 whenever EQUI 252 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.177.3	If the Permittee replaces TREA 43, the replacement control must meet or exceed the control efficiency requirements of TREA 43 as well as comply with all other requirements of TREA 43. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R.

Requirement number	Requirement and citation
	7007.3000]
5.177.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.177.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.177.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.177.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.177.8	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]
5.177.9	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]
5.177.10	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.177.11	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.177.12	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R.

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	7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.177.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.177.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.177.15	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 44	**Secondary Crusher Line 2 Baghouse**
5.178.1	The Permittee must vent emissions from EQUI 254 and EQUI 343 to TREA 44 whenever EQUI 254 and EQUI 343 operate and operate and maintain TREA 44 at all times that any emissions are vented to TREA 44. The Permittee must document periods of non-operation of the control equipment TREA 44 whenever EQUI 254 and EQUI 343 are operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.178.2	The Permittee must vent emissions from EQUI 254 and EQUI 343 to TREA 44 whenever EQUI 254 and EQUI 343 operate and operate and maintain TREA 44 at all times that any emissions are vented to TREA 44. The Permittee must document periods of non-operation of the control equipment TREA 44

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	whenever EQUI 254 and EQUI 343 are operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.178.3	If the Permittee replaces TREA 44, the replacement control must meet or exceed the control efficiency requirements of TREA 44 as well as comply with all other requirements of TREA 44. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.178.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.178.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.178.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.178.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.178.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.178.9	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.178.10	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]

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5.178.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.178.12	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.178.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.178.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.178.15	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.178.16	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.178.17	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.178.18	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2);

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	40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 45	**Secondary Crusher Line 3 Baghouse**
5.179.1	The Permittee must vent emissions from EQUI 255 and EQUI 343 to TREA 45 whenever EQUI 255 and EQUI 343 operate and operate and maintain TREA 45 at all times that any emissions are vented to TREA 45. The Permittee must document periods of non-operation of the control equipment TREA 45 whenever EQUI 255 and EQUI 343 are operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.179.2	The Permittee must vent emissions from EQUI 255 and EQUI 343 to TREA 45 whenever EQUI 255 and EQUI 343 operate and operate and maintain TREA 45 at all times that any emissions are vented to TREA 45. The Permittee must document periods of non-operation of the control equipment TREA 45 whenever EQUI 255 and EQUI 343 are operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.179.3	If the Permittee replaces TREA 45, the replacement control must meet or exceed the control efficiency requirements of TREA 45 as well as comply with all other requirements of TREA 45. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.179.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be

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	considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.179.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.179.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.179.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.179.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.179.9	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.179.10	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.179.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.179.12	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.179.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]

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5.179.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.179.15	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.179.16	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.179.17	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.179.18	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 46	**Secondary Crusher Line 4 Baghouse**
5.180.1	The Permittee must vent emissions from EQUI 256 and EQUI 343 to TREA 46 whenever EQUI 256 and

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	EQUI 343 operate and operate and maintain TREA 46 at all times that any emissions are vented to TREA 46. The Permittee must document periods of non-operation of the control equipment TREA 46 whenever EQUI 256 and EQUI 343 are operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.180.2	The Permittee must vent emissions from EQUI 256 and EQUI 343 to TREA 46 whenever EQUI 256 and EQUI 343 operate and operate and maintain TREA 46 at all times that any emissions are vented to TREA 46. The Permittee must document periods of non-operation of the control equipment TREA 46 whenever EQUI 256 and EQUI 343 are operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.180.3	If the Permittee replaces TREA 46, the replacement control must meet or exceed the control efficiency requirements of TREA 46 as well as comply with all other requirements of TREA 46. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.180.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.180.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.180.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.180.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.180.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]

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5.180.9	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.180.10	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.180.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.180.12	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.180.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.180.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.180.15	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.180.16	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]

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5.180.17	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.180.18	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 47	**Grizzly Transfer Tower Baghouse**
5.181.1	The Permittee must vent emissions from EQUI 251 to TREA 47 whenever EQUI 251 operates and operate and maintain TREA 47 at all times that any emissions are vented to TREA 47. The Permittee must document periods of non-operation of the control equipment TREA 47 whenever EQUI 251 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.181.2	The Permittee must vent emissions from EQUI 251 to TREA 47 whenever EQUI 251 operates and operate and maintain TREA 47 at all times that any emissions are vented to TREA 47. The Permittee must document periods of non-operation of the control equipment TREA 47 whenever EQUI 251 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.181.3	If the Permittee replaces TREA 47, the replacement control must meet or exceed the control efficiency requirements of TREA 47 as well as comply with all other requirements of TREA 47. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R.

Requirement number	Requirement and citation
	7007.3000]
5.181.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.181.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.181.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.181.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.181.8	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]
5.181.9	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]
5.181.10	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.181.11	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.181.12	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R.

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	7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.181.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.181.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.181.15	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 49	**Indurating Furnace Waste Gas Gas Suspension Absorber 1**
5.182.1	The Permittee must vent emissions from EQUI 258 to TREA 49 whenever EQUI 258 operates, and operate and maintain TREA 49 at all times that any emissions are vented to TREA 49. The Permittee must document periods of non-operation of the control equipment TREA 49 whenever EQUI 258 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.182.2	If the Permittee replaces TREA 49, the replacement control must meet or exceed the control efficiency requirements of TREA 49 as well as comply with all other requirements of TREA 49. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable.

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	If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.182.3	The Permittee must not inject any sorbent that will create CO2 emissions upon reaction with SO2, such as sodium bicarbonate or calcium carbonate. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.182.4	The Permittee must maintain the daily average dry sorbent injection rate greater than or equal to the average dry sorbent injection rate established during the most recent performance test. demonstrating compliance with the applicable emission limit. [40 CFR 63.9590(b)(7), Minn. R. 7011.8030]
5.182.5	The Permittee must maintain the daily average carrier gas flow rate greater than or equal to the average carrier gas flow rate established during the most recent performance test demonstrating compliance with the applicable emission limit. [40 CFR 63.9590(b)(7), Minn. R. 7011.8030]
5.182.6	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify any existing operating parameter, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.182.7	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.182.8	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.182.9	The Permittee shall operate and maintain the scrubber in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.182.10	The Permittee shall maintain and operate continuous parametric monitoring systems that continuously indicate and record the monitored operating parameters identified in the GSA Evaluation Report. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.182.11	The Permittee shall maintain a continuous hard copy readout or computer disk file of the operating parameter readings. Readings outside the range specified are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.182.12	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.182.13	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the recorded EQUI 258 SO2 emissions are greater than the applicable emission limits; or - the scrubber or any of its components are found during the inspections to need repair. Corrective actions shall return the EQUI 258 SO2 emissions to below the permitted level and/or include

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	completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the gas suspension absorber (GSA). The Permittee shall keep a record of the type and date of any corrective action taken for each control device. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.182.14	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording operating parameters as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored scrubber is in operation. [Minn. R. 7007.0800, subp. 4]
5.182.15	The Permittee shall calibrate the operating parameter monitors at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.182.16	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9590(b)(7); 40 CFR 63.9590(c); 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (3); 40 CFR 63.9610(a), (b), (d)(1), (d)(2), & (d)(6); 40 CFR 63.9622(i); 40 CFR 63.9623(c)(3); 40 CFR 63.9625; 40 CFR 63.9631(h); 40 CFR 63.9632(b)-(e), (h), & (i); 40 CFR 63.9633; 40 CFR 63.9634(a), (j)(2), (l); 40 CFR 63.9636(a)(1) & (3); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 51	**Mercury Control Carbon Bin Baghouse**
5.183.1	The Permittee must vent emissions from EQUI 122 to TREA 51 whenever EQUI 122 operates and operate and maintain TREA 51 at all times that any emissions are vented to TREA 51. The Permittee must document periods of non-operation of the control equipment TREA 51 whenever EQUI 122 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.183.2	The Permittee must vent emissions from EQUI 122 to TREA 51 whenever EQUI 122 operates and operate and maintain TREA 51 at all times that any emissions are vented to TREA 51. The Permittee must document periods of non-operation of the control equipment TREA 51 whenever EQUI 122 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]

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5.183.3	If the Permittee replaces TREA 51, the replacement control must meet or exceed the control efficiency requirements of TREA 51 as well as comply with all other requirements of TREA 51. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.183.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.183.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.183.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.183.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.183.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.183.9	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.183.10	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.183.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.183.12	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include

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	completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.183.13	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.183.14	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.183.15	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
TREA 52	**Scrubber Control Lime Bin Baghouse**
5.184.1	The Permittee must vent emissions from EQUI 123 to TREA 52 whenever EQUI 123 operates and operate and maintain TREA 52 at all times that any emissions are vented to TREA 52. The Permittee must document periods of non-operation of the control equipment TREA 52 whenever EQUI 123 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.184.2	The Permittee must vent emissions from EQUI 123 to TREA 52 whenever EQUI 123 operates and operate and maintain TREA 52 at all times that any emissions are vented to TREA 52. The Permittee must document periods of non-operation of the control equipment TREA 52 whenever EQUI 123 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.184.3	If the Permittee replaces TREA 52, the replacement control must meet or exceed the control efficiency requirements of TREA 52 as well as comply with all other requirements of TREA 52. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.184.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of

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	time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.184.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.184.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.184.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.184.8	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]
5.184.9	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]
5.184.10	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.184.11	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.184.12	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
TREA 68	**Coarse Ore Mill Bay Tunnel 1 Baghouse**
5.185.1	The Permittee must vent emissions from EQUI 110 to TREA 68 whenever EQUI 110 operates and operate and maintain TREA 68 at all times that any emissions are vented to TREA 68. The Permittee must document periods of non-operation of the control equipment TREA 68 whenever EQUI 110 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.185.2	The Permittee must vent emissions from EQUI 110 to TREA 68 whenever EQUI 110 operates and operate and maintain TREA 68 at all times that any emissions are vented to TREA 68. The Permittee must document periods of non-operation of the control equipment TREA 68 whenever EQUI 110 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency

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	(EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.185.3	If the Permittee replaces TREA 68, the replacement control must meet or exceed the control efficiency requirements of TREA 68 as well as comply with all other requirements of TREA 68. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.185.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [Title I Condition: 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.185.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.185.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.185.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.185.8	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]
5.185.9	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]
5.185.10	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months

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	and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.185.11	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.185.12	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.185.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.185.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.185.15	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]

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TREA 120	**Ore Dumping Baghouse**
5.186.1	The Permittee must vent emissions from EQUI 262 to TREA 120 whenever EQUI 262 operates and operate and maintain TREA 120 at all times that any emissions are vented to TREA 120. The Permittee must document periods of non-operation of the control equipment TREA 120 whenever EQUI 262 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.186.2	The Permittee must vent emissions from EQUI 262 to TREA 120 whenever EQUI 262 operates and operate and maintain TREA 120 at all times that any emissions are vented to TREA 120. The Permittee must document periods of non-operation of the control equipment TREA 120 whenever EQUI 262 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.186.3	If the Permittee replaces TREA 120, the replacement control must meet or exceed the control efficiency requirements of TREA 120 as well as comply with all other requirements of TREA 120. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.186.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.186.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.186.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.186.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.186.8	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur:

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	- the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]
5.186.9	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]
5.186.10	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.186.11	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.186.12	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.186.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.186.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.186.15	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d);

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	40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 122	**Rotary Rail Car Dumper Baghouse**
5.187.1	The Permittee must vent emissions from EQUI 293 to TREA 122 whenever EQUI 293 operates and operate and maintain TREA 122 at all times that any emissions are vented to TREA 122. The Permittee must document periods of non-operation of the control equipment TREA 122 whenever EQUI 293 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.187.2	The Permittee must vent emissions from EQUI 293 to TREA 122 whenever EQUI 293 operates and operate and maintain TREA 122 at all times that any emissions are vented to TREA 122. The Permittee must document periods of non-operation of the control equipment TREA 122 whenever EQUI 293 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.187.3	If the Permittee replaces TREA 122, the replacement control must meet or exceed the control efficiency requirements of TREA 122 as well as comply with all other requirements of TREA 122. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.187.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.187.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]

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5.187.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.187.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.187.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.187.9	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.187.10	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.187.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.187.12	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.187.13	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.187.14	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.187.15	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche,

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	provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
TREA 123	**2100 Tonne Stone Bin Baghouse**
5.188.1	The Permittee must vent emissions from EQUI 294 to TREA 123 whenever EQUI 294 operates and operate and maintain TREA 123 at all times that any emissions are vented to TREA 123. The Permittee must document periods of non-operation of the control equipment TREA 123 whenever EQUI 294 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.188.2	The Permittee must vent emissions from EQUI 294 to TREA 123 whenever EQUI 294 operates and operate and maintain TREA 123 at all times that any emissions are vented to TREA 123. The Permittee must document periods of non-operation of the control equipment TREA 123 whenever EQUI 294 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.188.3	If the Permittee replaces TREA 123, the replacement control must meet or exceed the control efficiency requirements of TREA 123 as well as comply with all other requirements of TREA 123. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.188.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.188.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.188.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.188.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]

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5.188.8	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]
5.188.9	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]
5.188.10	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.188.11	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.188.12	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
TREA 124	**5500 Tonne Limestone Storage Bin Bin Vent**
5.189.1	The Permittee must vent emissions from EQUI 295 to TREA 124 whenever EQUI 295 operates and operate and maintain TREA 124 at all times that any emissions are vented to TREA 124. The Permittee must document periods of non-operation of the control equipment TREA 124 whenever EQUI 295 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.189.2	The Permittee must vent emissions from EQUI 295 to TREA 124 whenever EQUI 295 operates and operate and maintain TREA 124 at all times that any emissions are vented to TREA 124. The Permittee must document periods of non-operation of the control equipment TREA 124 whenever EQUI 295 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.189.3	If the Permittee replaces TREA 124, the replacement control must meet or exceed the control efficiency requirements of TREA 124 as well as comply with all other requirements of TREA 124. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]

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5.189.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.189.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.189.6	The Permittee shall maintain and operate a pressure drop monitoring device that continuously indicates and records the pressure drop across the baghouse. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.189.7	The Permittee shall maintain a continuous hard copy readout or computer disk file of the pressure drop readings. Readings outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.189.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.189.9	The Permittee shall calibrate the pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.189.10	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.189.11	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.189.12	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.189.13	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as

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	required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.189.14	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
TREA 125	**5500 Tonne Dolomite Storage Bin Bin Vent**
5.190.1	The Permittee must vent emissions from EQUI 296 to TREA 125 whenever EQUI 296 operates and operate and maintain TREA 125 at all times that any emissions are vented to TREA 125. The Permittee must document periods of non-operation of the control equipment TREA 125 whenever EQUI 296 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.190.2	The Permittee must vent emissions from EQUI 296 to TREA 125 whenever EQUI 296 operates and operate and maintain TREA 125 at all times that any emissions are vented to TREA 125. The Permittee must document periods of non-operation of the control equipment TREA 125 whenever EQUI 296 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.190.3	If the Permittee replaces TREA 125, the replacement control must meet or exceed the control efficiency requirements of TREA 125 as well as comply with all other requirements of TREA 125. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.190.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.190.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.190.6	The Permittee shall maintain and operate a pressure drop monitoring device that continuously indicates and records the pressure drop across the baghouse. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]

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5.190.7	The Permittee shall maintain a continuous hard copy readout or computer disk file of the pressure drop readings. Readings outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.190.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.190.9	The Permittee shall calibrate the pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.190.10	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.190.11	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.190.12	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.190.13	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.190.14	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
TREA 126	**Train Unloading Conveyor Baghouse**
5.191.1	The Permittee must vent emissions from EQUI 297 to TREA 126 whenever EQUI 297 operates and operate and maintain TREA 126 at all times that any emissions are vented to TREA 126. The Permittee must document periods of non-operation of the control equipment TREA 126 whenever EQUI 297 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.191.2	The Permittee must vent emissions from EQUI 297 to TREA 126 whenever EQUI 297 operates and operate and maintain TREA 126 at all times that any emissions are vented to TREA 126. The Permittee must document periods of non-operation of the control equipment TREA 126 whenever EQUI 297 is operating.

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	This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.191.3	If the Permittee replaces TREA 126, the replacement control must meet or exceed the control efficiency requirements of TREA 126 as well as comply with all other requirements of TREA 126. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.191.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.191.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.191.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.191.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.191.8	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]
5.191.9	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the

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	monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]
5.191.10	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.191.11	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.191.12	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
TREA 127	**Overland Conveyor Baghouse**
5.192.1	The Permittee must vent emissions from EQUI 298 to TREA 127 whenever EQUI 298 operates and operate and maintain TREA 127 at all times that any emissions are vented to TREA 127. The Permittee must document periods of non-operation of the control equipment TREA 127 whenever EQUI 298 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.192.2	The Permittee must vent emissions from EQUI 298 to TREA 127 whenever EQUI 298 operates and operate and maintain TREA 127 at all times that any emissions are vented to TREA 127. The Permittee must document periods of non-operation of the control equipment TREA 127 whenever EQUI 298 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.192.3	If the Permittee replaces TREA 127, the replacement control must meet or exceed the control efficiency requirements of TREA 127 as well as comply with all other requirements of TREA 127. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.192.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.192.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use

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	by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.192.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.192.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.192.8	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]
5.192.9	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]
5.192.10	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.192.11	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.192.12	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
TREA 128	**Limestone and Dolomite Grinding Mill Baghouse**
5.193.1	The Permittee must vent emissions from EQUI 299 to TREA 128 whenever EQUI 299 operates and operate and maintain TREA 128 at all times that any emissions are vented to TREA 128. The Permittee must document periods of non-operation of the control equipment TREA 128 whenever EQUI 299 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.193.2	The Permittee must vent emissions from EQUI 299 to TREA 128 whenever EQUI 299 operates and operate and maintain TREA 128 at all times that any emissions are vented to TREA 128. The Permittee must document periods of non-operation of the control equipment TREA 128 whenever EQUI 299 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to

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	avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.193.3	If the Permittee replaces TREA 128, the replacement control must meet or exceed the control efficiency requirements of TREA 128 as well as comply with all other requirements of TREA 128. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.193.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.193.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.193.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.193.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.193.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.193.9	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.193.10	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.193.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]

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5.193.12	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.193.13	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.193.14	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.193.15	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
TREA 129	**Fine Ore Mill Bay Tunnel1B Baghouse**
5.194.1	The Permittee must vent emissions from EQUI 335 to TREA 129 whenever EQUI 335 operates and operate and maintain TREA 129 at all times that any emissions are vented to TREA 129. The Permittee must document periods of non-operation of the control equipment TREA 129 whenever EQUI 335 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.194.2	The Permittee must vent emissions from EQUI 335 to TREA 129 whenever EQUI 335 operates and operate and maintain TREA 129 at all times that any emissions are vented to TREA 129. The Permittee must document periods of non-operation of the control equipment TREA 129 whenever EQUI 335 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.194.3	If the Permittee replaces TREA 129, the replacement control must meet or exceed the control efficiency requirements of TREA 129 as well as comply with all other requirements of TREA 129. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]

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5.194.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.194.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.194.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.194.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.194.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.194.9	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.194.10	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.194.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.194.12	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.194.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood

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	evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.194.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.194.15	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.194.16	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.194.17	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.194.18	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon

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	adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 130	**Fine Ore Mill Bay Tunnel 2A Baghouse**
5.195.1	The Permittee must vent emissions from EQUI 336 to TREA 130 whenever EQUI 336 operates and operate and maintain TREA 130 at all times that any emissions are vented to TREA 130. The Permittee must document periods of non-operation of the control equipment TREA 130 whenever EQUI 336 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.195.2	The Permittee must vent emissions from EQUI 336 to TREA 130 whenever EQUI 336 operates and operate and maintain TREA 130 at all times that any emissions are vented to TREA 130. The Permittee must document periods of non-operation of the control equipment TREA 130 whenever EQUI 336 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.195.3	If the Permittee replaces TREA 130, the replacement control must meet or exceed the control efficiency requirements of TREA 130 as well as comply with all other requirements of TREA 130. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.195.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.195.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.195.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.195.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR

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	52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.195.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.195.9	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.195.10	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.195.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.195.12	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.195.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.195.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.195.15	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]

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5.195.16	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.195.17	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.195.18	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 131	**Fine Ore Mill Bay Tunnel 2B Baghouse**
5.196.1	The Permittee must vent emissions from EQUI 337 to TREA 131 whenever EQUI 337 operates and operate and maintain TREA 131 at all times that any emissions are vented to TREA 131. The Permittee must document periods of non-operation of the control equipment TREA 131 whenever EQUI 337 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.196.2	The Permittee must vent emissions from EQUI 337 to TREA 131 whenever EQUI 337 operates and operate and maintain TREA 131 at all times that any emissions are vented to TREA 131. The Permittee must document periods of non-operation of the control equipment TREA 131 whenever EQUI 337 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.196.3	If the Permittee replaces TREA 131, the replacement control must meet or exceed the control efficiency requirements of TREA 131 as well as comply with all other requirements of TREA 131. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment,

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	as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.196.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.196.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.196.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.196.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.196.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.196.9	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.196.10	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.196.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.196.12	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or

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	- the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.196.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.196.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.196.15	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.196.16	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.196.17	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.196.18	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2);

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	40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 132	**Fine Ore Mill Bay Tunnel 3A Baghouse**
5.197.1	The Permittee must vent emissions from EQUI 338 to TREA 132 whenever EQUI 338 operates and operate and maintain TREA 132 at all times that any emissions are vented to TREA 132. The Permittee must document periods of non-operation of the control equipment TREA 132 whenever EQUI 338 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.197.2	The Permittee must vent emissions from EQUI 338 to TREA 132 whenever EQUI 338 operates and operate and maintain TREA 132 at all times that any emissions are vented to TREA 132. The Permittee must document periods of non-operation of the control equipment TREA 132 whenever EQUI 338 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.197.3	If the Permittee replaces TREA 132, the replacement control must meet or exceed the control efficiency requirements of TREA 132 as well as comply with all other requirements of TREA 132. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.197.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.197.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.197.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across

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	the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.197.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.197.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.197.9	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.197.10	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.197.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.197.12	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.197.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.197.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]

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5.197.15	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.197.16	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.197.17	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.197.18	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 133	**Fine Ore Mill Bay Tunnel 3B Baghouse**
5.198.1	The Permittee must vent emissions from EQUI 339 to TREA 133 whenever EQUI 339 operates and operate and maintain TREA 133 at all times that any emissions are vented to TREA 133. The Permittee must document periods of non-operation of the control equipment TREA 133 whenever EQUI 339 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.198.2	The Permittee must vent emissions from EQUI 339 to TREA 133 whenever EQUI 339 operates and operate and maintain TREA 133 at all times that any emissions are vented to TREA 133. The Permittee must document periods of non-operation of the control equipment TREA 133 whenever EQUI 339 is operating.

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	This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.198.3	If the Permittee replaces TREA 133, the replacement control must meet or exceed the control efficiency requirements of TREA 133 as well as comply with all other requirements of TREA 133. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.198.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.198.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.198.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.198.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.198.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.198.9	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.198.10	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.198.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the

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	manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.198.12	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.198.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.198.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.198.15	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.198.16	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.198.17	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.198.18	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a);

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	40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 134	**Coarse Ore Mill Bay Tunnel 2 Baghouse**
5.199.1	The Permittee must vent emissions from EQUI 333 to TREA 134 whenever EQUI 333 operates and operate and maintain TREA 134 at all times that any emissions are vented to TREA 134. The Permittee must document periods of non-operation of the control equipment TREA 134 whenever EQUI 333 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.199.2	The Permittee must vent emissions from EQUI 333 to TREA 134 whenever EQUI 333 operates and operate and maintain TREA 134 at all times that any emissions are vented to TREA 134. The Permittee must document periods of non-operation of the control equipment TREA 134 whenever EQUI 333 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.199.3	If the Permittee replaces TREA 134, the replacement control must meet or exceed the control efficiency requirements of TREA 134 as well as comply with all other requirements of TREA 134. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.199.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1].

Requirement number	Requirement and citation
	[Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) and Minn. R. 7007.3000]
5.199.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.199.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.199.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.199.8	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]
5.199.9	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]
5.199.10	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.199.11	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.199.12	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.199.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.199.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the

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	fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.199.15	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 135	**Coarse Ore Mill Bay Tunnel 3 Baghouse**
5.200.1	The Permittee must vent emissions from EQUI 334 to TREA 135 whenever EQUI 334 operates and operate and maintain TREA 135 at all times that any emissions are vented to TREA 135. The Permittee must document periods of non-operation of the control equipment TREA 135 whenever EQUI 334 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.200.2	The Permittee must vent emissions from EQUI 334 to TREA 135 whenever EQUI 334 operates and operate and maintain TREA 135 at all times that any emissions are vented to TREA 135. The Permittee must document periods of non-operation of the control equipment TREA 135 whenever EQUI 334 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.200.3	If the Permittee replaces TREA 135, the replacement control must meet or exceed the control efficiency requirements of TREA 135 as well as comply with all other requirements of TREA 135. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the

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	Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.200.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.200.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.200.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.200.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.200.8	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]
5.200.9	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]
5.200.10	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.200.11	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]

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5.200.12	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.200.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.200.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.200.15	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 136	**Limestone Bin Bin Vent**
5.201.1	The Permittee must vent emissions from EQUI 191 to TREA 136 whenever EQUI 191 operates and operate and maintain TREA 136 at all times that any emissions are vented to TREA 136. The Permittee must document periods of non-operation of the control equipment TREA 136 whenever EQUI 191 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]

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5.201.2	The Permittee must vent emissions from EQUI 383 to TREA 136 whenever EQUI 383 is transferring material to EQUI 191 and operate and maintain TREA 136 at all times that any emissions are vented to TREA 136. The Permittee must document periods of non-operation of the control equipment TREA 136 whenever EQUI 383 is transferring material to EQUI 191. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.201.3	The Permittee must vent emissions from EQUI 191 to TREA 136 whenever EQUI 191 operates and operate and maintain TREA 136 at all times that any emissions are vented to TREA 136. The Permittee must document periods of non-operation of the control equipment TREA 136 whenever EQUI 191 is operating. The Permittee must vent emissions from EQUI 383 to TREA 136 whenever EQUI 383 is transferring material to EQUI 191, and operate and maintain TREA 136 at all times that any emissions are vented to TREA 136. The Permittee must document periods of non-operation of the control equipment TREA 136 whenever EQUI 383 is transferring material to EQUI 191. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.201.4	If the Permittee replaces TREA 136, the replacement control must meet or exceed the control efficiency requirements of TREA 136 as well as comply with all other requirements of TREA 136. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2) & Minn. R. 7007.3000]
5.201.5	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.201.6	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.201.7	The Permittee shall maintain and operate a pressure drop monitoring device that continuously indicates and records the pressure drop across the baghouse. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.201.8	The Permittee shall maintain a continuous hard copy readout or computer disk file of the pressure drop readings. Readings outside the range specified in this permit are considered Deviations as defined

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	by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.201.9	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.201.10	The Permittee shall calibrate the pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.201.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.201.12	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.201.13	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.201.14	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.201.15	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.201.16	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 191. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions. [40 CFR 64.3, Minn. R. 7017.0200]
TREA 137	**Organic Binder and Sodium Carbonate Bins Baghouse**
5.202.1	The Permittee must vent emissions from EQUI 193 and EQUI 214 to TREA 137 whenever EQUI 193 and EQUI 214 operate and operate and maintain TREA 137 at all times that any emissions are vented to TREA 137. The Permittee must document periods of non-operation of the control equipment TREA 137 whenever EQUI 193 or EQUI 214 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.202.2	The Permittee must vent emissions from EQUI 193 and EQUI 214 to TREA 137 whenever EQUI 193 and

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	EQUI 214 operate and operate and maintain TREA 137 at all times that any emissions are vented to TREA 137. The Permittee must document periods of non-operation of the control equipment TREA 137 whenever EQUI 193 or EQUI 214 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.202.3	If the Permittee replaces TREA 137, the replacement control must meet or exceed the control efficiency requirements of TREA 137 as well as comply with all other requirements of TREA 137. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.202.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.202.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.202.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.202.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.202.8	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee

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	shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]
5.202.9	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]
5.202.10	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.202.11	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.202.12	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
TREA 138	**Bentonite Receiving Bin 1 Bin Vent**
5.203.1	The Permittee must vent emissions from EQUI 341 to TREA 138 whenever EQUI 341 operates and operate and maintain TREA 138 at all times that any emissions are vented to TREA 138. The Permittee must document periods of non-operation of the control equipment TREA 138 whenever EQUI 341 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.203.2	The Permittee must vent emissions from EQUI 341 to TREA 138 whenever EQUI 341 operates and operate and maintain TREA 138 at all times that any emissions are vented to TREA 138. The Permittee must document periods of non-operation of the control equipment TREA 138 whenever EQUI 341 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.203.3	If the Permittee replaces TREA 138, the replacement control must meet or exceed the control efficiency requirements of TREA 138 as well as comply with all other requirements of TREA 138. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.203.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be

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	considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.203.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.203.6	The Permittee shall maintain and operate a pressure drop monitoring device that continuously indicates and records the pressure drop across the baghouse. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.203.7	The Permittee shall maintain a continuous hard copy readout or computer disk file of the pressure drop readings. Readings outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.203.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.203.9	The Permittee shall calibrate the pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.203.10	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.203.11	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.203.12	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.203.13	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.203.14	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does

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	not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
TREA 139	**Mixing Conveyor Baghouse**
5.204.1	The Permittee must vent emissions from EQUI 112 and EQUI 113 to TREA 139 whenever EQUI 112 and EQUI 113 operate and operate and maintain TREA 139 at all times that any emissions are vented to TREA 139. The Permittee must document periods of non-operation of the control equipment TREA 139 whenever EQUI 112 or EQUI 113 are operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.204.2	The Permittee must vent emissions from EQUI 112 and EQUI 113 to TREA 139 whenever EQUI 112 and EQUI 113 operate and operate and maintain TREA 139 at all times that any emissions are vented to TREA 139. The Permittee must document periods of non-operation of the control equipment TREA 139 whenever EQUI 112 or EQUI 113 are operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.204.3	If the Permittee replaces TREA 139, the replacement control must meet or exceed the control efficiency requirements of TREA 139 as well as comply with all other requirements of TREA 139. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.204.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.204.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.204.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.204.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R.

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	7007.3000]
5.204.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.204.9	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.204.10	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.204.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.204.12	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.204.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.204.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.204.15	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application

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	to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.204.16	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.204.17	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
TREA 140	**Product Junction House 2 Baghouse**
5.205.1	The Permittee must vent emissions from EQUI 286 to TREA 140 whenever EQUI 286 operates and operate and maintain TREA 140 at all times that any emissions are vented to TREA 140. The Permittee must document periods of non-operation of the control equipment TREA 140 whenever EQUI 286 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.205.2	The Permittee must vent emissions from EQUI 286 to TREA 140 whenever EQUI 286 operates and operate and maintain TREA 140 at all times that any emissions are vented to TREA 140. The Permittee must document periods of non-operation of the control equipment TREA 140 whenever EQUI 286 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.205.3	If the Permittee replaces TREA 140, the replacement control must meet or exceed the control efficiency requirements of TREA 140 as well as comply with all other requirements of TREA 140. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.205.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.205.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.205.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across

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	the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.205.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.205.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.205.9	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.205.10	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.205.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.205.12	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.205.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.205.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]

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5.205.15	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.205.16	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.205.17	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.205.18	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 141	**Product Junction House 3 Baghouse**
5.206.1	The Permittee must vent emissions from EQUI 287 to TREA 141 whenever EQUI 287 operates and operate and maintain TREA 141 at all times that any emissions are vented to TREA 141. The Permittee must document periods of non-operation of the control equipment TREA 141 whenever EQUI 287 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.206.2	The Permittee must vent emissions from EQUI 287 to TREA 141 whenever EQUI 287 operates and operate and maintain TREA 141 at all times that any emissions are vented to TREA 141. The Permittee must document periods of non-operation of the control equipment TREA 141 whenever EQUI 287 is operating.

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	This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.206.3	If the Permittee replaces TREA 141, the replacement control must meet or exceed the control efficiency requirements of TREA 141 as well as comply with all other requirements of TREA 141. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.206.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.206.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.206.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.206.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.206.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.206.9	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.206.10	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.206.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the

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	manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.206.12	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.206.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.206.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.206.15	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.206.16	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.206.17	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.206.18	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a);

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	40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 142	**Bentonite Receiving Bin 3 Bin Vent**
5.207.1	The Permittee must vent emissions from EQUI 288 to TREA 142 whenever EQUI 288 operates and operate and maintain TREA 142 at all times that any emissions are vented to TREA 142. The Permittee must document periods of non-operation of the control equipment TREA 142 whenever EQUI 288 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.207.2	The Permittee must vent emissions from EQUI 288 to TREA 142 whenever EQUI 288 operates and operate and maintain TREA 142 at all times that any emissions are vented to TREA 142. The Permittee must document periods of non-operation of the control equipment TREA 142 whenever EQUI 288 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.207.3	If the Permittee replaces TREA 142, the replacement control must meet or exceed the control efficiency requirements of TREA 142 as well as comply with all other requirements of TREA 142. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.207.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1].

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	[40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.207.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.207.6	The Permittee shall maintain and operate a pressure drop monitoring device that continuously indicates and records the pressure drop across the baghouse. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.207.7	The Permittee shall maintain a continuous hard copy readout or computer disk file of the pressure drop readings. Readings outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.207.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.207.9	The Permittee shall calibrate the pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.207.10	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.207.11	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.207.12	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.207.13	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.207.14	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
TREA 143	**Dolomite Bin Bin Vent**

Requirement number	Requirement and citation
5.208.1	The Permittee must vent emissions from EQUI 282 to TREA 143 whenever EQUI 282 operates and operate and maintain TREA 143 at all times that any emissions are vented to TREA 143. The Permittee must document periods of non-operation of the control equipment TREA 143 whenever EQUI 282 is operating. The Permittee must vent emissions from EQUI 383 to TREA 143 whenever EQUI 383 is transferring material to EQUI 282 and operate and maintain TREA 143 at all times that any emissions are vented to TREA 143. The Permittee must document periods of non-operation of the control equipment TREA 143 whenever EQUI 383 is transferring material to EQUI 282. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.208.2	The Permittee must vent emissions from EQUI 282 to TREA 143 whenever EQUI 282 operates and operate and maintain TREA 143 at all times that any emissions are vented to TREA 143. The Permittee must document periods of non-operation of the control equipment TREA 143 whenever EQUI 282 is operating. The Permittee must vent emissions from EQUI 383 to TREA 143 whenever EQUI 383 is transferring material to EQUI 282 and operate and maintain TREA 143 at all times that any emissions are vented to TREA 143. The Permittee must document periods of non-operation of the control equipment TREA 143 whenever EQUI 383 is transferring material to EQUI 282. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.208.3	If the Permittee replaces TREA 143, the replacement control must meet or exceed the control efficiency requirements of TREA 143 as well as comply with all other requirements of TREA 143. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.208.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.208.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.208.6	The Permittee shall maintain and operate a pressure drop monitoring device that continuously indicates and records the pressure drop across the baghouse. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid

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	major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.208.7	The Permittee shall maintain a continuous hard copy readout or computer disk file of the pressure drop readings. Readings outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.208.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.208.9	The Permittee shall calibrate the pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.208.10	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.208.11	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.208.12	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.208.13	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.208.14	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
TREA 144	**Bentonite Bin Bin Vent**
5.209.1	The Permittee must vent emissions from EQUI 283 to TREA 144 whenever EQUI 283 operates and operate and maintain TREA 144 at all times that any emissions are vented to TREA 144. The Permittee must document periods of non-operation of the control equipment TREA 144 whenever EQUI 283 is operating. The Permittee must vent emissions from EQUI 384 to TREA 144 whenever EQUI 384 is transferring material to EQUI 283 and operate and maintain TREA 144 at all times that any emissions are vented to TREA 144. The Permittee must document periods of non-operation of the control equipment TREA 144

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	whenever EQUI 384 is transferring material to EQUI 282. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.209.2	The Permittee must vent emissions from EQUI 283 to TREA 144 whenever EQUI 283 operates and operate and maintain TREA 144 at all times that any emissions are vented to TREA 144. The Permittee must document periods of non-operation of the control equipment TREA 144 whenever EQUI 283 is operating. The Permittee must vent emissions from EQUI 384 to TREA 144 whenever EQUI 384 is transferring material to EQUI 283 and operate and maintain TREA 144 at all times that any emissions are vented to TREA 144. The Permittee must document periods of non-operation of the control equipment TREA 144 whenever EQUI 384 is transferring material to EQUI 282. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.209.3	If the Permittee replaces TREA 144, the replacement control must meet or exceed the control efficiency requirements of TREA 144 as well as comply with all other requirements of TREA 144. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.209.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.209.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.209.6	The Permittee shall maintain and operate a pressure drop monitoring device that continuously indicates and records the pressure drop across the baghouse. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.209.7	The Permittee shall maintain a continuous hard copy readout or computer disk file of the pressure drop readings. Readings outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.209.8	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur:

Requirement number	Requirement and citation
	- the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]
5.209.9	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]
5.209.10	The Permittee shall calibrate or replace the pressure drop monitor at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.209.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
TREA 145	**Storage Bin 1 Bin Vent**
5.210.1	The Permittee must vent emissions from EQUI 284 to TREA 145 whenever EQUI 284 operates and operate and maintain TREA 145 at all times that any emissions are vented to TREA 145. The Permittee must document periods of non-operation of the control equipment TREA 145 whenever EQUI 284 is operating. The Permittee must vent emissions from EQUI 384 to TREA 145 whenever EQUI 384 is transferring material to EQUI 284 and operate and maintain TREA 145 at all times that any emissions are vented to TREA 145. The Permittee must document periods of non-operation of the control equipment TREA 145 whenever EQUI 384 is transferring material to EQUI 284. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.210.2	The Permittee must vent emissions from EQUI 284 to TREA 145 whenever EQUI 284 operates and operate and maintain TREA 145 at all times that any emissions are vented to TREA 145. The Permittee must document periods of non-operation of the control equipment TREA 145 whenever EQUI 284 is operating. The Permittee must vent emissions from EQUI 384 to TREA 145 whenever EQUI 384 is transferring material to EQUI 284 and operate and maintain TREA 145 at all times that any emissions are vented to TREA 145. The Permittee must document periods of non-operation of the control equipment TREA 145 whenever EQUI 384 is transferring material to EQUI 284. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.210.3	If the Permittee replaces TREA 145, the replacement control must meet or exceed the control efficiency requirements of TREA 145 as well as comply with all other requirements of TREA 145. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R.

Requirement number	Requirement and citation
	7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.210.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.210.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.210.6	The Permittee shall maintain and operate a pressure drop monitoring device that continuously indicates and records the pressure drop across the baghouse. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.210.7	The Permittee shall maintain a continuous hard copy readout or computer disk file of the pressure drop readings. Readings outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.210.8	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]
5.210.9	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]
5.210.10	The Permittee shall calibrate or replace the pressure drop monitor at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.210.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
TREA 146	**Residual Silo Baghouse**
5.211.1	The Permittee must vent emissions from EQUI 281 to TREA 146 whenever EQUI 281 operates and operate and maintain TREA 146 at all times that any emissions are vented to TREA 146. The Permittee must document periods of non-operation of the control equipment TREA 146 whenever EQUI 281 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition:

Requirement number	Requirement and citation
	Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.211.2	The Permittee must vent emissions from EQUI 281 to TREA 146 whenever EQUI 281 operates and operate and maintain TREA 146 at all times that any emissions are vented to TREA 146. The Permittee must document periods of non-operation of the control equipment TREA 146 whenever EQUI 281 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.211.3	If the Permittee replaces TREA 146, the replacement control must meet or exceed the control efficiency requirements of TREA 146 as well as comply with all other requirements of TREA 146. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.211.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.211.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.211.6	The Permittee shall maintain and operate a pressure drop monitoring device that continuously indicates and records the pressure drop across the baghouse. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.211.7	The Permittee shall maintain a continuous hard copy readout or computer disk file of the pressure drop readings. Readings outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.211.8	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]

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5.211.9	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]
5.211.10	The Permittee shall calibrate or replace the pressure drop monitor at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.211.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
TREA 147	**Storage Bin 2 Bin Vent**
5.212.1	The Permittee must vent emissions from EQUI 285 to TREA 147 whenever EQUI 285 operates and operate and maintain TREA 147 at all times that any emissions are vented to TREA 147. The Permittee must document periods of non-operation of the control equipment TREA 147 whenever EQUI 285 is operating. The Permittee must vent emissions from EQUI 384 to TREA 147 whenever EQUI 384 is transferring material to EQUI 285 and operate and maintain TREA 147 at all times that any emissions are vented to TREA 147. The Permittee must document periods of non-operation of the control equipment TREA 147 whenever EQUI 384 is transferring material to EQUI 285. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.212.2	The Permittee must vent emissions from EQUI 285 to TREA 147 whenever EQUI 285 operates and operate and maintain TREA 147 at all times that any emissions are vented to TREA 147. The Permittee must document periods of non-operation of the control equipment TREA 147 whenever EQUI 285 is operating. The Permittee must vent emissions from EQUI 384 to TREA 147 whenever EQUI 384 is transferring material to EQUI 285 and operate and maintain TREA 147 at all times that any emissions are vented to TREA 147. The Permittee must document periods of non-operation of the control equipment TREA 147 whenever EQUI 384 is transferring material to EQUI 285. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.212.3	If the Permittee replaces TREA 147, the replacement control must meet or exceed the control efficiency requirements of TREA 147 as well as comply with all other requirements of TREA 147. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.212.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change.

Requirement number	Requirement and citation
	If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.212.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.212.6	The Permittee shall maintain and operate a pressure drop monitoring device that continuously indicates and records the pressure drop across the baghouse. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.212.7	The Permittee shall maintain a continuous hard copy readout or computer disk file of the pressure drop readings. Readings outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.212.8	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]
5.212.9	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]
5.212.10	The Permittee shall calibrate or replace the pressure drop monitor at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.212.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
TREA 148	**Pellet Bunker Tripper Conveyor Baghouse**
5.213.1	The Permittee must vent emissions from EQUI 300 to TREA 148 whenever EQUI 300 operates and operate and maintain TREA 148 at all times that any emissions are vented to TREA 148. The Permittee must document periods of non-operation of the control equipment TREA 148 whenever EQUI 300 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.213.2	The Permittee must vent emissions from EQUI 300 to TREA 148 whenever EQUI 300 operates and operate and maintain TREA 148 at all times that any emissions are vented to TREA 148. The Permittee must document periods of non-operation of the control equipment TREA 148 whenever EQUI 300 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency

Requirement number	Requirement and citation
	(EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.213.3	If the Permittee replaces TREA 148, the replacement control must meet or exceed the control efficiency requirements of TREA 148 as well as comply with all other requirements of TREA 148. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.213.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.213.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.213.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.213.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.213.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.213.9	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.213.10	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.213.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The

Requirement number	Requirement and citation
	Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.213.12	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.213.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.213.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.213.15	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.213.16	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.213.17	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.213.18	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required)

Requirement number	Requirement and citation
	40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 149	**Pellet Bunker Product Conveyor Baghouse**
5.214.1	The Permittee must vent emissions from EQUI 303 to TREA 149 whenever EQUI 303 operates and operate and maintain TREA 149 at all times that any emissions are vented to TREA 149. The Permittee must document periods of non-operation of the control equipment TREA 149 whenever EQUI 303 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.214.2	The Permittee must vent emissions from EQUI 303 to TREA 149 whenever EQUI 303 operates and operate and maintain TREA 149 at all times that any emissions are vented to TREA 149. The Permittee must document periods of non-operation of the control equipment TREA 149 whenever EQUI 303 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.214.3	If the Permittee replaces TREA 149, the replacement control must meet or exceed the control efficiency requirements of TREA 149 as well as comply with all other requirements of TREA 149. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.214.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I

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	Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.214.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.214.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.214.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.214.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.214.9	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.214.10	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.214.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.214.12	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.214.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.214.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and

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	operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.214.15	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.214.16	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.214.17	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.214.18	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 150	**Primary Crusher Building Baghouse**
5.215.1	The Permittee must vent emissions from EQUI 131 and EQUI 289 to TREA 150 whenever EQUI 131 and EQUI 289 operate and operate and maintain TREA 150 at all times that any emissions are vented to TREA 150. The Permittee must document periods of non-operation of the control equipment TREA 150 whenever EQUI 131 and EQUI 289 are operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) &

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	Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.215.2	The Permittee must vent emissions from EQUI 131 and EQUI 289 to TREA 150 whenever EQUI 131 and EQUI 289 operate and operate and maintain TREA 150 at all times that any emissions are vented to TREA 150. The Permittee must document periods of non-operation of the control equipment TREA 150 whenever EQUI 131 and EQUI 289 are operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.215.3	If the Permittee replaces TREA 150, the replacement control must meet or exceed the control efficiency requirements of TREA 150 as well as comply with all other requirements of TREA 150. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.215.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.215.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.215.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.215.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.215.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.215.9	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]

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5.215.10	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.215.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.215.12	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.215.13	Hood Certification and Evaluation: The Permittee shall maintain the most current record of the hood evaluation and certification on site. The control device hood must be evaluated by a testing company as specified in Minn. R. 7011.0072, subp. 2(A) and must conform to the design and operating requirements listed in Minn. R. 7011.0072, subps. 2(B) and 3. The hood certification must address how cross-drafts are accommodated in the design (e.g., higher face velocity, oversized hood, etc.) and the Permittee shall certify this as specified in Minn. R. 7011.0072, subps. 2 and 3. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.215.14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow parameter that was measured during the most recent hood certification to verify the hood design and operation parameters meet or exceed the parameters measured during the most recent hood evaluation conducted according to Minn. R. 7011.0072, subps. 2 & 3 as required by Minn. R. 7011.0072, subp. 4. The Permittee shall maintain a copy of the annual evaluations on site for 5 years. [Stage 1]. [Minn. R. 7007.0800, subp. 2(A), Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.215.15	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.215.16	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.215.17	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does

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	not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.215.18	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 151	**Pneumatic Transport Vent 1 Bin Vent**
5.216.1	The Permittee must vent emissions from EQUI 290 to TREA 151 whenever EQUI 290 operates and operate and maintain TREA 151 at all times that any emissions are vented to TREA 151. The Permittee must document periods of non-operation of the control equipment TREA 151 whenever EQUI 290 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.216.2	The Permittee must vent emissions from EQUI 290 to TREA 151 whenever EQUI 290 operates and operate and maintain TREA 151 at all times that any emissions are vented to TREA 151. The Permittee must document periods of non-operation of the control equipment TREA 151 whenever EQUI 290 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.216.3	If the Permittee replaces TREA 151, the replacement control must meet or exceed the control efficiency requirements of TREA 151 as well as comply with all other requirements of TREA 151. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.216.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the

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	Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.216.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.216.6	The Permittee shall maintain and operate a pressure drop monitoring device that continuously indicates and records the pressure drop across the baghouse. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.216.7	The Permittee shall maintain a continuous hard copy readout or computer disk file of the pressure drop readings. Readings outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.216.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.216.9	The Permittee shall calibrate the pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.216.10	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.216.11	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.216.12	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.216.13	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]

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5.216.14	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
TREA 152	**Pneumatic Transport Vent 2 Bin Vent**
5.217.1	The Permittee must vent emissions from EQUI 291 to TREA 152 whenever EQUI 291 operates and operate and maintain TREA 152 at all times that any emissions are vented to TREA 152. The Permittee must document periods of non-operation of the control equipment TREA 152 whenever EQUI 291 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.217.2	The Permittee must vent emissions from EQUI 291 to TREA 152 whenever EQUI 291 operates and operate and maintain TREA 152 at all times that any emissions are vented to TREA 152. The Permittee must document periods of non-operation of the control equipment TREA 152 whenever EQUI 291 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.217.3	If the Permittee replaces TREA 152, the replacement control must meet or exceed the control efficiency requirements of TREA 152 as well as comply with all other requirements of TREA 152. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.217.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.217.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.217.6	The Permittee shall maintain and operate a pressure drop monitoring device that continuously indicates and records the pressure drop across the baghouse. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.217.7	The Permittee shall maintain a continuous hard copy readout or computer disk file of the pressure drop readings. Readings outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40

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	CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.217.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.217.9	The Permittee shall calibrate the pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.217.10	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.217.11	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.217.12	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.217.13	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.217.14	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
TREA 153	**Bentonite Unloading Baghouse 2**
5.218.1	The Permittee must vent emissions from EQUI 340 to TREA 153 whenever EQUI 340 operates and operate and maintain TREA 153 at all times that any emissions are vented to TREA 153. The Permittee must document periods of non-operation of the control equipment TREA 153 whenever EQUI 340 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.218.2	The Permittee must vent emissions from EQUI 340 to TREA 153 whenever EQUI 340 operates and operate and maintain TREA 153 at all times that any emissions are vented to TREA 153. The Permittee must document periods of non-operation of the control equipment TREA 153 whenever EQUI 340 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to

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	avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.218.3	If the Permittee replaces TREA 153, the replacement control must meet or exceed the control efficiency requirements of TREA 153 as well as comply with all other requirements of TREA 153. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.218.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.218.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.218.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.218.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.218.8	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]
5.218.9	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]
5.218.10	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800,

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	subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.218.11	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [Minn. R. 7007.0800, subp. 4, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.218.12	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
TREA 154	**55 Tonne Day Bin Bin Vent**
5.219.1	The Permittee must vent emissions from EQUI 304 to TREA 154 whenever EQUI 304 operates and operate and maintain TREA 154 at all times that any emissions are vented to TREA 154. The Permittee must document periods of non-operation of the control equipment TREA 154 whenever EQUI 304 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.219.2	The Permittee must vent emissions from EQUI 304 to TREA 154 whenever EQUI 304 operates and operate and maintain TREA 154 at all times that any emissions are vented to TREA 154. The Permittee must document periods of non-operation of the control equipment TREA 154 whenever EQUI 304 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.219.3	If the Permittee replaces TREA 154, the replacement control must meet or exceed the control efficiency requirements of TREA 154 as well as comply with all other requirements of TREA 154. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.219.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) and Minn. R. 7007.3000]
5.219.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.219.6	The Permittee shall maintain and operate a pressure drop monitoring device that continuously indicates and records the pressure drop across the baghouse. [Stage 1]. [Minn. R. 7007.0800, subps. 4-

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	5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.219.7	The Permittee shall maintain a continuous hard copy readout or computer disk file of the pressure drop readings. Readings outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) and Minn. R. 7007.3000]
5.219.8	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]
5.219.9	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]
5.219.10	The Permittee shall calibrate or replace the pressure drop monitor at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.219.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
TREA 158	**Pneumatic Transport Vent 3 Bin Vent**
5.220.1	The Permittee must vent emissions from EQUI 322 to TREA 158 whenever EQUI 322 operates and operate and maintain TREA 158 at all times that any emissions are vented to TREA 158. The Permittee must document periods of non-operation of the control equipment TREA 158 whenever EQUI 322 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.220.2	The Permittee must vent emissions from EQUI 322 to TREA 158 whenever EQUI 322 operates and operate and maintain TREA 158 at all times that any emissions are vented to TREA 158. The Permittee must document periods of non-operation of the control equipment TREA 158 whenever EQUI 322 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.220.3	If the Permittee replaces TREA 158, the replacement control must meet or exceed the control efficiency requirements of TREA 158 as well as comply with all other requirements of TREA 158. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R.

Requirement number	Requirement and citation
	7007.3000]
5.220.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.220.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.220.6	The Permittee shall maintain and operate a pressure drop monitoring device that continuously indicates and records the pressure drop across the baghouse. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.220.7	The Permittee shall maintain a continuous hard copy readout or computer disk file of the pressure drop readings. Readings outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.220.8	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]
5.220.9	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]
5.220.10	The Permittee shall calibrate or replace the pressure drop monitor at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.220.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
TREA 159	**Indurating Furnace Waste Gas Activated Carbon Injection 1**
5.221.1	The Permittee must vent emissions from EQUI 258 to TREA 159 whenever EQUI 258 operates, and operate and maintain TREA 159 at all times that any emissions are vented to TREA 159. The Permittee must document periods of non-operation of the control equipment TREA 159 whenever EQUI 258 is operating.

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	This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 14]
5.221.2	If the Permittee replaces TREA 159, the replacement control must meet or exceed the control efficiency requirements of TREA 159 as well as comply with all other requirements of TREA 159. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and citizens under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 2(B)]
5.221.3	The Permittee shall operate and maintain the activated carbon injection (ACI) system in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and citizens under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 14]
5.221.4	The Permittee shall maintain and operate continuous parametric monitoring systems that continuously indicate and record the monitored operating parameters. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. flow rate. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D)]
5.221.5	The Permittee shall maintain a continuous hard copy readout or computer disk file of the operating parameter readings. Readings outside the range specified are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. flow rate. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 5(A)]
5.221.6	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. flow rate. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 14]
5.221.7	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the recorded operating parameters are outside the required operating range; or - the ACI system or any of its components are found during the inspections to need repair. Corrective actions shall return the operating parameters within the permitted level and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the ACI system. The Permittee shall keep a record of the type and date of any corrective action taken for each control device.

Requirement number	Requirement and citation
	This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. flow rate. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 14]
5.221.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording operating parameters as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored scrubber is in operation. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. flow rate. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D)]
5.221.9	The Permittee shall calibrate the operating parameter monitors at least once every 12 months and shall maintain a written record of any action resulting from the calibration. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. flow rate. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D), Minn. R. 7007.0800, subp. 5(A)]
5.221.10	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9590(c); 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (3); 40 CFR 63.9610(a), (b), (d)(2), & (d)(6); 40 CFR 63.9625; 40 CFR 63.9633; 40 CFR 63.9634(n); 40 CFR 63.9636(a)(1); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a), (c), & (e); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 170	**Pellet Loadout Baghouse**
5.222.1	The Permittee must vent emissions from EQUI 376 to TREA 170 whenever EQUI 376 operates and operate and maintain TREA 170 at all times that any emissions are vented to TREA 170. The Permittee must document periods of non-operation of the control equipment TREA 170 whenever EQUI 376 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.222.2	The Permittee must vent emissions from EQUI 376 to TREA 170 whenever EQUI 376 operates and operate and maintain TREA 170 at all times that any emissions are vented to TREA 170. The Permittee must document periods of non-operation of the control equipment TREA 170 whenever EQUI 376 is operating.

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	This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 4410.4430, subp. 15(A) (limit to avoid threshold), Minn. R. 7007.0800, subp. 2(A) & 2(B)]
5.222.3	If the Permittee replaces TREA 170, the replacement control must meet or exceed the control efficiency requirements of TREA 170 as well as comply with all other requirements of TREA 170. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.222.4	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.222.5	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.222.6	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.222.7	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.222.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.222.9	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.222.10	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2)(i) & Minn. R. 7007.3000]
5.222.11	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the

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	manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.222.12	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.222.13	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.222.14	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.222.15	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.222.16	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R.

Requirement number	Requirement and citation
	7011.8030]
TREA 173	**Indurating Furnace Waste Gas Multiclone 2**
5.223.1	The Permittee must vent emissions from EQUI 258 to TREA 173 whenever 258 operates, and operate and maintain TREA 173 at all times that any emissions are vented to TREA 173. The Permittee must document periods of non-operation of the control equipment TREA 14 whenever EQUI 258 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.223.2	If the Permittee replaces TREA 173, the replacement control must meet or exceed the control efficiency requirements of TREA 173 as well as comply with all other requirements of TREA 173. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.223.3	The Permittee shall operate and maintain the cyclone in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.223.4	The Permittee shall maintain and operate a pressure drop monitoring device that continuously indicates and records the pressure drop across the multiclone. The recording device shall also calculate the three-hour rolling average pressure drop. [40 CFR 64.3(b)(ii), Minn. R. 7017.0200]
5.223.5	The Permittee shall maintain a continuous hard copy readout or computer disk file of the pressure drop readings. Readings outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.223.6	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.223.7	Annual Calibration: The Permittee shall calibrate the pressure drop monitor at least once every 12 months and shall maintain a written record of the calibration and any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.223.8	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.223.9	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the recorded pressure drop is outside the required operating range; or - the multiclone or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the multiclone. The Permittee shall keep a record of the type and date of any corrective action taken for each control device. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.223.10	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]

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5.223.11	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.223.12	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.223.13	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9590(b)(8); 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (3); 40 CFR 63.9610(a) & (b); 40 CFR 63.9622(e) & (f); 40 CFR 63.9623(b)(5); 40 CFR 63.9623(c); 40 CFR 63.9625; 40 CFR 63.9631(i); 40 CFR 63.9632(b)-(e); 40 CFR 63.9633; 40 CFR 63.9634(a), (k), & (l); 40 CFR 63.9636(a)(1) & (3); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 174	**Indurating Furnace Waste Gas Gas Suspension Absorber 2**
5.224.1	The Permittee must vent emissions from EQUI 258 to TREA 174 whenever EQUI 258 operates, and operate and maintain TREA 174 at all times that any emissions are vented to TREA 174. The Permittee must document periods of non-operation of the control equipment TREA 174 whenever EQUI 258 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.224.2	If the Permittee replaces TREA 174, the replacement control must meet or exceed the control efficiency requirements of TREA 174 as well as comply with all other requirements of TREA 174. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R.

Requirement number	Requirement and citation
	7007.3000]
5.224.3	The Permittee must not inject any sorbent that will create CO2 emissions upon reaction with SO2, such as sodium bicarbonate or calcium carbonate. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.224.4	The Permittee must maintain the daily average dry sorbent injection rate greater than or equal to the average dry sorbent injection rate established during the most recent performance test. demonstrating compliance with the applicable emission limit. [40 CFR 63.9590(b)(7), Minn. R. 7011.8030]
5.224.5	The Permittee must maintain the daily average carrier gas flow rate greater than or equal to the average carrier gas flow rate established during the most recent performance test demonstrating compliance with the applicable emission limit. [40 CFR 63.9590(b)(7), Minn. R. 7011.8030]
5.224.6	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify any existing operating parameter, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.224.7	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.224.8	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.224.9	The Permittee shall operate and maintain the scrubber in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.224.10	The Permittee shall maintain and operate continuous parametric monitoring systems that continuously indicate and record the monitored operating parameters identified in the GSA Evaluation Report. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.224.11	The Permittee shall maintain a continuous hard copy readout or computer disk file of the operating parameter readings. Readings outside the range specified are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.224.12	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.224.13	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the recorded EQUI 258 SO2 emissions are greater than the applicable emission limits; or - the scrubber or any of its components are found during the inspections to need repair. Corrective actions shall return the EQUI 258 SO2 emissions to below the permitted level and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the gas suspension absorber (GSA). The Permittee shall keep a record of the type and date of any corrective action taken for each control

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	device. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.224.14	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording operating parameters as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored scrubber is in operation. [Minn. R. 7007.0800, subp. 4]
5.224.15	The Permittee shall calibrate the operating parameter monitors at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
5.224.16	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9590(b)(7); 40 CFR 63.9590(c); 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (3); 40 CFR 63.9610(a), (b), (d)(1), (d)(2), & (d)(6); 40 CFR 63.9622(i); 40 CFR 63.9623(c)(3); 40 CFR 63.9625; 40 CFR 63.9631(h); 40 CFR 63.9632(b)-(e), (h), & (i); 40 CFR 63.9633; 40 CFR 63.9634(a), (j)(2), (l); 40 CFR 63.9636(a)(1) & (3); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 175	**Indurating Furnace Waste Gas Activated Carbon Injection 2**
5.225.1	The Permittee must vent emissions from EQUI 258 to TREA 175 whenever EQUI 258 operates, and operate and maintain TREA 175 at all times that any emissions are vented to TREA 175. The Permittee must document periods of non-operation of the control equipment TREA 175 whenever EQUI 258 is operating. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 14]
5.225.2	If the Permittee replaces TREA 175, the replacement control must meet or exceed the control efficiency requirements of TREA 175 as well as comply with all other requirements of TREA 175. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the

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	commencement/start of replacement. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and citizens under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 2(B)]
5.225.3	The Permittee shall operate and maintain the activated carbon injection (ACI) system in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and citizens under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 14]
5.225.4	The Permittee shall maintain and operate continuous parametric monitoring systems that continuously indicate and record the monitored operating parameters. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. flow rate. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D)]
5.225.5	The Permittee shall maintain a continuous hard copy readout or computer disk file of the operating parameter readings. Readings outside the range specified are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. flow rate. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 5(A)]
5.225.6	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. flow rate. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 14]
5.225.7	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the recorded operating parameters are outside the required operating range; or - the ACI system or any of its components are found during the inspections to need repair. Corrective actions shall return the operating parameters within the permitted level and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the ACI system. The Permittee shall keep a record of the type and date of any corrective action taken for each control device. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. flow rate. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 14]
5.225.8	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording operating parameters as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored scrubber is in operation. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency

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	(EPA) Administrator and persons under the Clean Air Act. flow rate. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D)]
5.225.9	The Permittee shall calibrate the operating parameter monitors at least once every 12 months and shall maintain a written record of any action resulting from the calibration. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. flow rate. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D), Minn. R. 7007.0800, subp. 5(A)]
5.225.10	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9590(c); 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (3); 40 CFR 63.9610(a), (b), (d)(2), & (d)(6); 40 CFR 63.9625; 40 CFR 63.9633; 40 CFR 63.9634(n); 40 CFR 63.9636(a)(1); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a), (c), & (e); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]
TREA 176	**Indurating Furnace Waste Gas Baghouse 2**
5.226.1	The Permittee must vent emissions from EQUI 258 to TREA 176 whenever EQUI 258 operates and operate and maintain TREA 176 at all times that any emissions are vented to TREA 176. The Permittee must document periods of non-operation of the control equipment TREA 176 whenever EQUI 258 is operating. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.226.2	If the Permittee replaces TREA 176, the replacement control must meet or exceed the control efficiency requirements of TREA 176 as well as comply with all other requirements of TREA 176. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.226.3	Pressure Drop >= 2.0 and <= 10 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. The Permittee shall record the pressure drop at least once every 24 hours.

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	If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.226.4	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
5.226.5	Daily Inspections: The Permittee shall, once every 24 hours, read and record the pressure drop across the fabric filter. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.226.6	Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading, and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered Deviations as defined by Minn. R. 7007.0100, subp. 8a. [Stage 1]. [40 CFR 64.9(b), Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.226.7	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for monitoring with a bag leak detector and measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [40 CFR 64.7(b), Minn. R. 7017.0200]
5.226.8	The Permittee shall calibrate the bag leak detector and pressure gauge at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [40 CFR 64.3, Minn. R. 7017.0200]
5.226.9	The Permittee shall operate and maintain a bag leak detector at all times that the fabric filter and emission unit controlled by the fabric filter is in operation. Operation and maintenance of the bag leak detector shall be included in the O & M Plan. [Stage 1]. [40 CFR 64.3, Minn. R. 7017.0200, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
5.226.10	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [40 CFR 64.3, Minn. R. 7017.0200]
5.226.11	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the alarm for the bag leak detector is triggered; or - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [40 CFR 64.7(d), Minn. R. 7017.0200]
5.226.12	Documentation of Need for Improved Monitoring: If the Permittee fails to achieve compliance with an emission limitation or standard for which the monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing bag leak detector monitoring or pressure drop range, the Permittee shall promptly notify the MPCA and, if necessary, submit a permit amendment application to address the necessary monitoring change. [40 CFR 64.7(e), Minn. R. 7017.0200]
5.226.13	As required by 40 CFR 64.9(a)(2), for the Semi-Annual Deviations Report required by this permit and/or the Notification of Deviations Endangering Human Health and the Environment required by this permit, as applicable, the Permittee shall include the following related to the monitoring identified as required by 40 CFR pt. 64: 1) Summary information on the number, duration, and cause of excursions or exceedances, as applicable, and the corrective action taken; and 2) Summary information on the

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	number, duration, and cause for monitor downtime incidents. [40 CFR 64.9(a)(2), Minn. R. 7017.0200]
5.226.14	The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, and other supporting information required to be maintained. The Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b), Minn. R. 7017.0200]
5.226.15	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. RRRRR, as follows: 40 CFR 63.9600(a) & (b); 40 CFR 63.9600(b)(1) & (2); 40 CFR 63.9610(a); 40 CFR 63.9631(a) (bag leak detection system required) 40 CFR 63.9631(a)(1)-(6) & (8); 40 CFR 63.9632(a); 40 CFR 63.9633; 40 CFR 63.9634(a) & (d); 40 CFR 63.9636(a)(1) & (2); 40 CFR 63.9636(b); 40 CFR 63.9637; 40 CFR 63.9642(a) & (c); 40 CFR 63.9643; and 40 CFR 63.9652. A copy of 40 CFR pt. 63, subp. RRRRR is included in Appendix O. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 63, subp. RRRRR, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8030]

6. Submittal/action requirements

This section lists most of the submittals required by this permit. Please note that some submittal requirements may appear in the Limits and Other Requirements section, or, if applicable, within a Compliance Schedule section.

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TFAC 1	**Mesabi Metallics Co LLC**
6.1.1	The Permittee must submit a construction progress report: Due semiannually, by the 30th of January and July. The first semiannual report submitted by the Permittee must cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. Each construction progress report must include: - A detailed description of the construction activities conducted at the facility within the reporting period, - The number of construction hours spent during the reporting period, - The estimated construction completion percentage for the facility at the end of the reporting period; and - A complete list of the start and end dates of any work stoppage lasting for seven days or more during the reporting period. The construction progress report must be submitted with the semiannual deviations report required by this permit. The Permittee must submit the construction progress reports until the Permittee has completed construction of all equipment listed in Appendix E. The final construction progress report must cover the semiannual reporting period in which the Permittee completed construction of the final equipment listed in Appendix E. The construction progress reports are no longer required after the final report submittal. [Minn. R. 7007.0800, subp. 16(L)]
6.1.2	The Permittee must submit a notification of the date construction commenced: Due 15 calendar days after the commence construction date of the modifications authorized by Air Emissions Permit No. 06100067-005. For this requirement, "commence" has the meaning as defined in 40 CFR 52.21(b)(9). The notification must be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
6.1.3	The Permittee must submit notification of the date of construction completion: Due 15 calendar days after the construction completion date of the facility. For this requirement, the construction completion date of the facility is considered the latest construction completion date of the equipment listed in Appendix E. The notification must be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
6.1.4	The Permittee must submit a notification of the date of initial startup: Due 15 calendar days after the initial startup date of the facility. For this requirement, the initial startup date of the facility is considered the latest initial startup date of the equipment listed in Appendix E. The notification must be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
6.1.5	Mercury: Mercury Reduction Plan Implementation Reports: The Permittee must submit annual progress reports to the commissioner by April 1 of each year starting with the year following plan approval until one full year after achievement of the reduction as described in the plan. The report must provide the status of facility modifications and actions taken in the preceding 12 months on each of the plan elements as identified in Minn. R. 7007.0502, subp. 5. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and citizens under the Clean Air Act. [Minn. R. 7007.0502, subp. 8]
6.1.6	The Permittee must submit a Haul Road Control Efficiency Study Plan: Due 6 months after initial

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	startup of EQUI 131. The Permittee must submit the plan to the Air Quality Permit Section Manager. The plan must detail the methods to be used in a study to determine and measure the effectiveness of the methods used to control fugitive dust from FUGI 6, FUGI 13, and FUGI 100. At a minimum, the haul road control efficiency study must analyze: - the effects of roadbed material moisture content on fugitive dust control; - the effects of variable traffic loads on fugitive dust control; - the effects of variable water application rates on fugitive dust control; - the effects weather has on fugitive dust control; and - other fugitive dust control techniques not currently identified in the Fugitive Dust Control Plan found in Appendix I, including but not limited to a continuous sprinkler system. The Permittee must receive written approval of the plan from the MPCA prior to initiating the study. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]
6.1.7	Request for Information: due 60 days after receipt of written MPCA request regarding the Haul Road Control Efficiency Study Plan. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]
6.1.8	The Permittee must submit a Haul Road Control Efficiency Study Report: Due 9 months after the after receipt of written MPCA approval of the Haul Road Control Efficiency Study Plan. The Permittee must submit the report to the Air Quality Permit Section Manager. The report must: - detail the results of all analyses conducted in the study; - quantitatively determine the effectiveness of the control techniques identified in the Fugitive Dust Control Plan found in Appendix I; - propose improvements to the current fugitive dust control practices based on the results of the study; and - identify any new fugitive dust control strategies as determined by the study. The Permittee must update the Fugitive Dust Control Plan as necessary to reflect the outcomes of the study. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]
6.1.9	The Permittee shall submit excess emission/downtime report : Due by 30 days after the end of each calendar quarter following permit issuance. Submit this on form DRF-1 (Excess Emissions Reporting) as amended. The EER shall indicate all periods of monitor bypass and exceedances of the limit including those allowed by an applicable standard, i.e. during startup, shutdown, and malfunctions, as well as a summary of audit results and frequencies. If no excess emissions, downtime or bypasses occurred during the quarter, submit a signed report supplying the necessary monitor data needed to verify this. [Minn. R. 7017.1110, subp. 1-2]
6.1.10	The Permittee must submit an annual report by the 31st of January that documents the hourly CO, O2, SO2, and NOx emissions data recorded by the CEMSs for the previous calendar year. The report must be submitted with the annual Compliance Certification required by this permit. [Minn. R. 7007.0800, subp. 16(L)]
6.1.11	The Permittee must submit a semiannual deviations report : Due semiannually, by the 30th of January and July. The first semiannual report submitted by the Permittee must cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. Submit this on form DRF-2 (Deviation Reporting Form). If no deviations have occurred, submit the signed report certifying that there were no deviations. [Minn. R. 7007.0800, subp. 6(B)(2)]
6.1.12	The Permittee must submit a compliance certification : Due annually, by the 31st of January (for the previous calendar year). Submit this on form CR-04 (Annual Compliance Certification Report). This report covers all deviations experienced during the calendar year. If no deviations have occurred, submit the signed report certifying that there were no deviations. [Minn. R. 7007.0800, subp. 6(D)]
6.1.13	The Permittee must submit a schedule : Due annually, by the 31st of January provide a complete

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	summary of all performance tests required at the facility which includes the subject item, pollutant, most recent test date (if applicable), and the date of the next test on a form approved by the Commissioner. The performance test summary must be submitted with the Annual Compliance Certification (CR-04) Report. [Minn. R. 7007.0800, subp. 16(L)]
6.1.14	The Permittee shall submit an application for permit reissuance : Due 180 calendar days before Permit Expiration Date. [Minn. R. 7007.0400, subp. 2]
COMG 2	**Finished Pellet Handling**
6.2.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date of pellet production. Startup is as defined in 40 CFR 63.2. The notification shall be submitted electronically on Form CS-02. [40 CFR 63.9(b)(4)(v), 40 CFR 63.9640(a), Minn. R. 7011.8030, Minn. R. 7019.0100, subp. 2(A)]
6.2.2	The Permittee shall submit a notification of compliance status: Due 60 calendar days after the Initial Performance Test Dates for COMG 40, COMG 41, COMG 49, COMG 65, COMG 66, and EQUI 376 for filterable PM emissions, including the performance test results. If the performance test results have been submitted electronically in accordance with 40 CFR 63.9641(f), the process unit(s) tested, the pollutant(s) tested, and the date that such performance test was conducted may be submitted in the notification of compliance status report in lieu of the performance test results. The performance test results must be submitted to the Compliance and Emissions Data Reporting Interface (CEDRI) by the date the notification of compliance status report is submitted. [40 CFR 63.9623(f), 40 CFR 63.9640(e)(2), Minn. R. 7011.8030]
6.2.3	The Permittee must submit a semiannual compliance report: Due semiannually, by the 31st of January and July. The semiannual compliance reports must include the information in 40 CFR 63.9641(b)(1) through (8), as applicable. [40 CFR 63.9641(a) & (b), Minn. R. 7011.8030]
COMG 21	**Indurating Furnace**
6.3.1	The Permittee must submit an Operation and Maintenance Plan: Due before Initial Startup Date of EQUI 257 and EQUI 258. The Operation and Maintenance Plan must identify a set of good combustion practices for the indurating furnace. The good combustion practices should correspond to the standard operating procedures for maintaining the proper and efficient combustion within the indurating furnace. Good combustion practices include, but are not limited to: - proper operating conditions for the indurating furnace (e.g., minimum combustion temperature, maximum carbon monoxide concentration in the furnace exhaust gases, burner alignment, or proper fuel-air distribution/mixing); - routine inspection and preventative maintenance and corresponding schedules; and - performance analyses. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.3.2	Production: The Permittee must submit an annual report by the 31st of January after the initial startup date of EQUI 257 and EQUI 258. The report must document the 12-month rolling sum high-flux pellet and low-flux pellet production calculations for the previous calendar year. The report must be submitted with the annual Compliance Certification required by this permit. [Minn. R. 7007.0800, subp. 16(L)]
6.3.3	Carbon Dioxide Equivalent: The Permittee must submit an annual report by the 31st of January, after the initial startup date of EQUI 257 and EQUI 258. The report must document the CO2e 12-month rolling sum calculations for the previous calendar year. The report must be submitted with the annual Compliance Certification required by this permit. [Minn. R. 7007.0800, subp. 16(L)]
6.3.4	Mercury: The Permittee must submit an annual report by the 31st of January, after the initial startup date of EQUI 257 and EQUI 258. The report must document: - the monthly uncontrolled mercury emissions calculations, as calculated in Appendix R; and - the 12-month rolling sum mercury emissions calculations for each month of the previous calendar year, as determined from the monthly mercury CEMS data. The report must be submitted with the annual Compliance Certification required by this permit.

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	This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and citizens under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 16(L)]
6.3.5	The Permittee must submit an Operation and Maintenance Plan: Due before Initial Startup Date of EQUI 257 and EQUI 258. The Operation and Maintenance Plan must explain why the chosen practices (i.e., quantified objectives) are good combustion practices (GCP) in minimizing the formation of formaldehyde (and other products of incomplete combustion). The operation and maintenance plan must address the elements in 40 CFR 63.9600(b)(4). [40 CFR 63.9600(b), Minn. R. 7011.8030]
6.3.6	The Permittee must submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date of EQUI 257 and EQUI 258. Startup is as defined in 40 CFR 63.2. [40 CFR 63.9(b)(4)(v), 40 CFR 63.9640(a), Minn. R. 7011.8030, Minn. R. 7019.0100, subp. 2(A)]
6.3.7	The Permittee must submit a notification of compliance status: Due 60 calendar days after the Initial Performance Test Dates for EQUI 257 and EQUI 258 for filterable PM emissions, including the performance test results. If the performance test results have been submitted electronically in accordance with 40 CFR 63.9641(f), the process unit(s) tested, the pollutant(s) tested, and the date that such performance test was conducted may be submitted in the notification of compliance status report in lieu of the performance test results. The performance test results must be submitted to the Compliance and Emissions Data Reporting Interface (CEDRI) by the date the notification of compliance status report is submitted. [40 CFR 63.9623(f), 40 CFR 63.9640(e)(2), Minn. R. 7011.8030]
6.3.8	The Permittee must submit a semiannual compliance report: Due semiannually, by the 31st of January and July. The semiannual compliance reports must include the information in 40 CFR 63.9641(b)(1) through (8), as applicable. [40 CFR 63.9641(a) & (b), Minn. R. 7011.8030]
COMG 23	**Ore Crushing & Handling**
6.4.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date of ore crushing operations. Startup is as defined in 40 CFR 63.2. For this requirement, startup means the setting in operation of any emission unit in COMG 23 for any reason. [40 CFR 63.9(b)(4)(v), 40 CFR 63.9640(a), Minn. R. 7011.8030, Minn. R. 7019.0100, subp. 2(A)]
6.4.2	The Permittee shall submit a notification of compliance status: Due 60 calendar days after the Initial Performance Test Dates for COMG 35, COMG 36, COMG 37, COMG 38, COMG 56, EQUI 132, and EQUI 262 for filterable PM emissions, including the performance test results. If the performance test results have been submitted electronically in accordance with 40 CFR 63.9641(f), the process unit(s) tested, the pollutant(s) tested, and the date that such performance test was conducted may be submitted in the notification of compliance status report in lieu of the performance test results. The performance test results must be submitted to the Compliance and Emissions Data Reporting Interface (CEDRI) by the date the notification of compliance status report is submitted. [40 CFR 63.9623(f), 40 CFR 63.9640(e)(2), Minn. R. 7011.8030]
6.4.3	The Permittee must submit a semiannual compliance report: Due semiannually, by the 31st of January and July. The semiannual compliance reports must include the information in 40 CFR 63.9641(b)(1) through (8), as applicable. [40 CFR 63.9641(a) & (b), Minn. R. 7011.8030]
COMG 45	**Fugitive Sources**
6.5.1	The Permittee shall submit a notification of compliance status: Due 30 calendar days after the date of initial compliance demonstration with the work practice standards under 40 CFR 63.9624. [40 CFR 63.9640(e)(1), Minn. R. 7011.8030]
COMG 47	**Additive Mixing Equipment**
6.6.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 112 and EQUI 113 and at a minimum every 60 months thereafter to measure emissions.

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	The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010]
6.6.2	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 112 and EQUI 113 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.6.3	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 112 and EQUI 113 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference

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	Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.6.4	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 112 and EQUI 113 and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
COMG 48	**Pellet Powder Coating Equipment**
6.7.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 145 and EQUI 146 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010]
6.7.2	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 145 and EQUI 146 and at a minimum every 60 months thereafter to

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	measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.7.3	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 145 and EQUI 146 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.7.4	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 145 and EQUI 146 and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit.

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	The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
COMG 49	**Pellet Bunker Equipment**
6.8.1	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date of EQUI 300 and EQUI 303 and at a minimum every 24 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 24 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 24 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.8.2	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date of EQUI 300 and EQUI 303 and at a minimum every 24 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 24 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 24 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date.

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	For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(c), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.8.3	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 300 and EQUI 303 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.8.4	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 300 and EQUI 303 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.8.5	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 300 and EQUI 303 and at a minimum every 60 months thereafter to measure opacity.

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	The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
COMG 50	**Pellet Discharge Equipment**
6.9.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 127 and EQUI 135 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.9.2	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date of EQUI 127 and EQUI 135 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit.

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	The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(c), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.9.3	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 127 and EQUI 135 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.9.4	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 127 and EQUI 135 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval.

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	Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.9.5	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 127 and EQUI 135 and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.9.6	Filterable Particulate Matter: The Permittee shall submit a performance test notification: Due 60 calendar days before the filterable particulate matter performance test is initially scheduled to begin. [40 CFR 63.7(b), 40 CFR 63.9640(d), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A)]
6.9.7	Filterable Particulate Matter: The Permittee shall submit the performance test results: Due 60 days after the completion of each performance test required by 40 CFR pt. 63, subp. RRRRR, following the procedures specified in 40 CFR 63.9641(f)(1) through (3). [40 CFR 63.9641(f), Minn. R. 7011.8030]
COMG 51	**Hearth Layer Separation Equipment**
6.10.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 135 and EQUI 259 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date

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	for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.10.2	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date of EQUI 135 and EQUI 259 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(c), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.10.3	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 135 and EQUI 259 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT)

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	& Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.10.4	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 135 and EQUI 259 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.10.5	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 135 and EQUI 259 and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.10.6	Filterable Particulate Matter: The Permittee shall submit a performance test notification: Due 60 calendar days before the filterable particulate matter performance test is initially scheduled to begin. [40 CFR 63.7(b), 40 CFR 63.9640(d), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A)]
6.10.7	Filterable Particulate Matter: The Permittee shall submit the performance test results: Due 60 days after the completion of each performance test required by 40 CFR pt. 63, subp. RRRRR, following the procedures specified in 40 CFR 63.9641(f)(1) through (3). [40 CFR 63.9641(f), Minn. R. 7011.8030]
COMG 52	**Secondary Crusher Line 1 Equipment**
6.11.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar

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	days after Initial Startup Date of EQUI 253 and EQUI 343 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.11.2	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date of EQUI 253 and EQUI 343 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(c), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.11.3	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 253 and EQUI 343 and at a minimum every 60 months thereafter to measure emissions.

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	The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.11.4	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 253 and EQUI 343 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.11.5	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 253 and EQUI 343 and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005,

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	subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.11.6	Filterable Particulate Matter: The Permittee shall submit a performance test notification: Due 60 calendar days before the filterable particulate matter performance test is initially scheduled to begin. [40 CFR 63.7(b), 40 CFR 63.9640(d), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A)]
6.11.7	Filterable Particulate Matter: The Permittee shall submit the performance test results: Due 60 days after the completion of each performance test required by 40 CFR pt. 63, subp. RRRRR, following the procedures specified in 40 CFR 63.9641(f)(1) through (3). [40 CFR 63.9641(f), Minn. R. 7011.8030]
COMG 53	**Secondary Crusher Line 2 Equipment**
6.12.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 254 and EQUI 343 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.12.2	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date of EQUI 254 and EQUI 343 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval.

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	Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(c), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.12.3	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 254 and EQUI 343 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.12.4	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 254 and EQUI 343 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this

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	test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.12.5	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 254 and EQUI 343 and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.12.6	Filterable Particulate Matter: The Permittee shall submit a performance test notification: Due 60 calendar days before the filterable particulate matter performance test is initially scheduled to begin. [40 CFR 63.7(b), 40 CFR 63.9640(d), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A)]
6.12.7	Filterable Particulate Matter: The Permittee shall submit the performance test results: Due 60 days after the completion of each performance test required by 40 CFR pt. 63, subp. RRRRR, following the procedures specified in 40 CFR 63.9641(f)(1) through (3). [40 CFR 63.9641(f), Minn. R. 7011.8030]
COMG 54	**Secondary Crusher Line 3 Equipment**
6.13.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 255 and EQUI 343 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT)

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	& Minn. R. 7007.3000]
6.13.2	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date of EQUI 255 and EQUI 343 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(c), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.13.3	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 255 and EQUI 343 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.13.4	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 255 and EQUI 343 and at a minimum every 60 months thereafter to

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	measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.13.5	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 255 and EQUI 343 and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.13.6	Filterable Particulate Matter: The Permittee shall submit a performance test notification: Due 60 calendar days before the filterable particulate matter performance test is initially scheduled to begin. [40 CFR 63.7(b), 40 CFR 63.9640(d), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A)]
6.13.7	Filterable Particulate Matter: The Permittee shall submit the performance test results: Due 60 days after the completion of each performance test required by 40 CFR pt. 63, subp. RRRRR, following the procedures specified in 40 CFR 63.9641(f)(1) through (3). [40 CFR 63.9641(f), Minn. R. 7011.8030]
COMG 55	**Secondary Crusher Line 4 Equipment**
6.14.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 256 and EQUI 343 and at a minimum every 60 months thereafter to measure emissions.

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	The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.14.2	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date of EQUI 256 and EQUI 343 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(c), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.14.3	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 256 and EQUI 343 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test

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	date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.14.4	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 256 and EQUI 343 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.14.5	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 256 and EQUI 343 and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date

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	for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.14.6	Filterable Particulate Matter: The Permittee shall submit a performance test notification: Due 60 calendar days before the filterable particulate matter performance test is initially scheduled to begin. [40 CFR 63.7(b), 40 CFR 63.9640(d), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A)]
6.14.7	Filterable Particulate Matter: The Permittee shall submit the performance test results: Due 60 days after the completion of each performance test required by 40 CFR pt. 63, subp. RRRRR, following the procedures specified in 40 CFR 63.9641(f)(1) through (3). [40 CFR 63.9641(f), Minn. R. 7011.8030]
COMG 56	**Primary Crusher Building Equipment**
6.15.1	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date of EQUI 131 and EQUI 289 and at a minimum every 24 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 24 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 24 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.15.2	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date of EQUI 300 and EQUI 303 and at a minimum every 24 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 24 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 24 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent

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	performance test date. For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(c), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.15.3	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 131 and EQUI 289 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.15.4	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 131 and EQUI 289 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.15.5	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial

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	Startup Date of EQUI 131 and EQUI 289 and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.15.6	Filterable Particulate Matter: The Permittee shall submit a performance test notification: Due 60 calendar days before the filterable particulate matter performance test is initially scheduled to begin. [40 CFR 63.7(b), 40 CFR 63.9640(d), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A)]
6.15.7	Filterable Particulate Matter: The Permittee shall submit the performance test results: Due 60 days after the completion of each performance test required by 40 CFR pt. 63, subp. RRRRR, following the procedures specified in 40 CFR 63.9641(f)(1) through (3). [40 CFR 63.9641(f), Minn. R. 7011.8030]
COMG 57	**Coarse Ore Storage Conveyor Equipment**
6.16.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 140 and EQUI 263 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.16.2	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date of EQUI 140 and EQUI 263 and at a minimum every 60 months thereafter to measure emissions.

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	The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(c), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.16.3	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 140 and EQUI 263 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.16.4	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 140 and EQUI 263 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall

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	be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.16.5	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 140 and EQUI 263 and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.16.6	Filterable Particulate Matter: The Permittee shall submit a performance test notification: Due 60 calendar days before the filterable particulate matter performance test is initially scheduled to begin. [40 CFR 63.7(b), 40 CFR 63.9640(d), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A)]
6.16.7	Filterable Particulate Matter: The Permittee shall submit the performance test results: Due 60 days after the completion of each performance test required by 40 CFR pt. 63, subp. RRRRR, following the procedures specified in 40 CFR 63.9641(f)(1) through (3). [40 CFR 63.9641(f), Minn. R. 7011.8030]
COMG 58	**Fine Ore Storage Conveyor Equipment**
6.17.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 141 and EQUI 264 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at

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	less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.17.2	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date of EQUI 141 and EQUI 264 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(c), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.17.3	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 141 and EQUI 264 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit.

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	The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.17.4	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 141 and EQUI 264 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.17.5	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 141 and EQUI 264 and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]

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6.17.6	Filterable Particulate Matter: The Permittee shall submit a performance test notification: Due 60 calendar days before the filterable particulate matter performance test is initially scheduled to begin. [40 CFR 63.7(b), 40 CFR 63.9640(d), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A)]
6.17.7	Filterable Particulate Matter: The Permittee shall submit the performance test results: Due 60 days after the completion of each performance test required by 40 CFR pt. 63, subp. RRRRR, following the procedures specified in 40 CFR 63.9641(f)(1) through (3). [40 CFR 63.9641(f), Minn. R. 7011.8030]
COMG 59	**Storage Bin 1 Equipment**
6.18.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 284 and EQUI 384 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.18.2	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 284 and EQUI 384 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.18.3	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 284 and EQUI 384 and at a minimum every 60 months thereafter to

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	measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.18.4	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 284 and EQUI 384 and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
COMG 60	**Storage Bin 2 Equipment**
6.19.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 285 and EQUI 384 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit.

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	The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.19.2	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 285 and EQUI 384 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.19.3	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 285 and EQUI 384 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]

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6.19.4	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 285 and EQUI 384 and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
COMG 61	**Bentonite Bin Equipment**
6.20.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 283 and EQUI 384 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.20.2	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 283 and EQUI 384 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate

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	the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.20.3	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 283 and EQUI 384 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.20.4	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 283 and EQUI 384 and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent

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	performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
COMG 62	**Dolomite Bin Equipment**
6.21.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 282 and EQUI 383 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.21.2	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 282 and EQUI 383 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.21.3	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 282 and EQUI 383 and at a minimum every 60 months thereafter to measure emissions.

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	The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.21.4	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 282 and EQUI 383 and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
COMG 63	**Limestone Bin Equipment**
6.22.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 191 and EQUI 383 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005,

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	subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010]
6.22.2	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 191 and EQUI 383 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.22.3	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 191 and EQUI 383 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.22.4	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 191 and EQUI 383 and at a minimum every 60 months thereafter to measure

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	opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
COMG 64	**Organic Binder and Sodium Carbonate Bins Equipment**
6.23.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 193 and EQUI 214 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 63.43(g)(2)(MACT) & Minn. R. 7007.3010]
6.23.2	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 193 and EQUI 214 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit.

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	The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.23.3	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 193 and EQUI 214 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.23.4	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 193 and EQUI 214 and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]

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COMG 65	**Hearth Layer Equipment**
6.24.1	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date of EQUI 114, EQUI 124, and EQUI 135 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.24.2	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date of EQUI 114, EQUI 124, and EQUI 135 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(c), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.24.3	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 114, EQUI 124, and EQUI 135 and at a minimum every 60 months

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	thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.24.4	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 114, EQUI 124, and EQUI 135 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.24.5	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 114, EQUI 124, and EQUI 135 and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit.

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	The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
COMG 66	**Product Junction House 4 Equipment**
6.25.1	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date of EQUI 331 and EQUI 347 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.25.2	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date of EQUI 331 and EQUI 347 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date.

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	For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(c), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.25.3	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 331 and EQUI 347 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.25.4	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 331 and EQUI 347 and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.25.5	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date of EQUI 331 and EQUI 347 and at a minimum every 60 months thereafter to measure opacity.

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	The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
EQUI 20	**Indurating Furnace Hood Exhaust Stack CO CEMS**
6.26.1	Installation Notification: due 60 days before installing the continuous emissions monitoring system. The notification shall include plans and drawings of the system. [Minn. R. 7017.1040, subp. 1]
6.26.2	The Permittee shall submit start-up notification: Due 10 working days after Startup of Monitor Date. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 2]
6.26.3	Certification Test Plan due 30 days before Certification Test. Certification Test Pretest Meeting due seven days before Certification Test. Certification Test Report due 45 days after Certification Test. Notify the commissioner prior to making any planned change or if unforeseen, within two working days, when a monitor must be recertified as outlined in Minn. R. 7017.1050, subp. 2. Test plans and reports must be submitted in a format specified by the commissioner. [Minn. R. 7017.1060, subp. 1-3, Minn. R. 7017.1080]
6.26.4	CEMS Certification/Recertification Test: due 90 days after the first excess emissions report required for the CEMS or any change which invalidates the monitor's certification status as outlined in Minn. R. 7017.1050, subp. 2. [Minn. R. 7017.1050, subp. 1]
6.26.5	The Permittee shall conduct CEMS cylinder gas audit (CGA): Due by the end of every second QA operating quarter (calendar quarter in which there are at least 168 unit operating hours) except that a CGA is not required during any quarter in which a RATA is performed. The initial CGA must be performed within 180 days following certification of the CEMS. The CGAs shall be conducted according to the procedures outlined in Minn. R. 7017.1170, subp 4a(A). If the monitored emission unit is not in operation on the CGA due date, the owner or operator has a grace period of 168 operating hours to perform the CGA. [Minn. R. 7017.1170, subp. 4a]
6.26.6	Cylinder Gas Audit (CGA) Results Summary: due 30 days after end of each calendar quarter in which a CGA was conducted. [Minn. R. 7017.1180, subp. 1]
6.26.7	Relative Accuracy Test Audit (RATA) Notification: due 30 days before CEMS Relative Accuracy Test Audit (RATA). [Minn. R. 7017.1180, subp. 2]
6.26.8	The Permittee shall conduct a relative accuracy test audit: Due by the end of every fourth QA operating quarter (calendar quarter in which there are at least 168 unit operating hours). RATAs shall be conducted and frequency may be reduced according to the procedures outlined in Minn. R. 7017.1170, subp. 5a. If the monitored emission unit is not in operation on the RATA due date, the

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	owner or operator has a grace period of 720 operating hours to perform the RATA. [Minn. R. 7017.1170, subp. 5a]
6.26.9	Relative Accuracy Test Audit (RATA) Results Summary: due 30 days after end of each calendar quarter in which a RATA was conducted. [Minn. R. 7017.1180, subp. 3]
EQUI 21	**Indurating Furnace Hood Exhaust Stack SO2 CEMS**
6.27.1	Installation Notification: due 60 days before installing the continuous emissions monitoring system. The notification shall include plans and drawings of the system. [Minn. R. 7017.1040, subp. 1]
6.27.2	The Permittee shall submit start-up notification: Due 10 working days after Startup of Monitor Date. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 2]
6.27.3	Certification Test Plan due 30 days before Certification Test. Certification Test Pretest Meeting due seven days before Certification Test. Certification Test Report due 45 days after Certification Test. Notify the commissioner prior to making any planned change or if unforeseen, within two working days, when a monitor must be recertified as outlined in Minn. R. 7017.1050, subp. 2. Test plans and reports must be submitted in a format specified by the commissioner. [Minn. R. 7017.1060, subp. 1-3, Minn. R. 7017.1080]
6.27.4	CEMS Certification/Recertification Test: due 90 days after the first excess emissions report required for the CEMS or any change which invalidates the monitor's certification status as outlined in Minn. R. 7017.1050, subp. 2. [Minn. R. 7017.1050, subp. 1]
6.27.5	The Permittee shall conduct CEMS cylinder gas audit (CGA): Due by the end of every second QA operating quarter (calendar quarter in which there are at least 168 unit operating hours) except that a CGA is not required during any quarter in which a RATA is performed. The initial CGA must be performed within 180 days following certification of the CEMS. The CGAs shall be conducted according to the procedures outlined in Minn. R. 7017.1170, subp 4a(A). If the monitored emission unit is not in operation on the CGA due date, the owner or operator has a grace period of 168 operating hours to perform the CGA. [Minn. R. 7017.1170, subp. 4a]
6.27.6	Cylinder Gas Audit (CGA) Results Summary: due 30 days after end of each calendar quarter in which a CGA was conducted. [Minn. R. 7017.1180, subp. 1]
6.27.7	Relative Accuracy Test Audit (RATA) Notification: due 30 days before CEMS Relative Accuracy Test Audit (RATA). [Minn. R. 7017.1180, subp. 2]
6.27.8	The Permittee shall conduct a relative accuracy test audit: Due by the end of every fourth QA operating quarter (calendar quarter in which there are at least 168 unit operating hours). RATAs shall be conducted and frequency may be reduced according to the procedures outlined in Minn. R. 7017.1170, subp. 5a. If the monitored emission unit is not in operation on the RATA due date, the owner or operator has a grace period of 720 operating hours to perform the RATA. [Minn. R. 7017.1170, subp. 5a]
6.27.9	Relative Accuracy Test Audit (RATA) Results Summary: due 30 days after end of each calendar quarter in which a RATA was conducted. [Minn. R. 7017.1180, subp. 3]
EQUI 24	**Indurating Furnace Waste Gas Stack CO CEMS**
6.28.1	Installation Notification: due 60 days before installing the continuous emissions monitoring system. The notification shall include plans and drawings of the system. [Minn. R. 7017.1040, subp. 1]
6.28.2	The Permittee shall submit start-up notification: Due 10 working days after Startup of Monitor Date. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 2]
6.28.3	Certification Test Plan due 30 days before Certification Test. Certification Test Pretest Meeting due seven days before Certification Test. Certification Test Report due 45 days after Certification Test.

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	Notify the commissioner prior to making any planned change or if unforeseen, within two working days, when a monitor must be recertified as outlined in Minn. R. 7017.1050, subp. 2. Test plans and reports must be submitted in a format specified by the commissioner. [Minn. R. 7017.1060, subp. 1-3, Minn. R. 7017.1080]
6.28.4	CEMS Certification/Recertification Test: due 90 days after the first excess emissions report required for the CEMS or any change which invalidates the monitor's certification status as outlined in Minn. R. 7017.1050, subp. 2. [Minn. R. 7017.1050, subp. 1]
6.28.5	The Permittee shall conduct CEMS cylinder gas audit (CGA): Due by the end of every second QA operating quarter (calendar quarter in which there are at least 168 unit operating hours) except that a CGA is not required during any quarter in which a RATA is performed. The initial CGA must be performed within 180 days following certification of the CEMS. The CGAs shall be conducted according to the procedures outlined in Minn. R. 7017.1170, subp 4a(A). If the monitored emission unit is not in operation on the CGA due date, the owner or operator has a grace period of 168 operating hours to perform the CGA. [Minn. R. 7017.1170, subp. 4a]
6.28.6	Cylinder Gas Audit (CGA) Results Summary: due 30 days after end of each calendar quarter in which a CGA was conducted. [Minn. R. 7017.1180, subp. 1]
6.28.7	Relative Accuracy Test Audit (RATA) Notification: due 30 days before CEMS Relative Accuracy Test Audit (RATA). [Minn. R. 7017.1180, subp. 2]
6.28.8	The Permittee shall conduct a relative accuracy test audit: Due by the end of every fourth QA operating quarter (calendar quarter in which there are at least 168 unit operating hours). RATAs shall be conducted and frequency may be reduced according to the procedures outlined in Minn. R. 7017.1170, subp. 5a. If the monitored emission unit is not in operation on the RATA due date, the owner or operator has a grace period of 720 operating hours to perform the RATA. [Minn. R. 7017.1170, subp. 5a]
6.28.9	Relative Accuracy Test Audit (RATA) Results Summary: due 30 days after end of each calendar quarter in which a RATA was conducted. [Minn. R. 7017.1180, subp. 3]
EQUI 25	**Indurating Furnace Waste Gas Stack SO2 CEMS**
6.29.1	Installation Notification: due 60 days before installing the continuous emissions monitoring system. The notification shall include plans and drawings of the system. [Minn. R. 7017.1040, subp. 1]
6.29.2	The Permittee shall submit start-up notification: Due 10 working days after Startup of Monitor Date. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 2]
6.29.3	Certification Test Plan due 30 days before Certification Test. Certification Test Pretest Meeting due seven days before Certification Test. Certification Test Report due 45 days after Certification Test. Notify the commissioner prior to making any planned change or if unforeseen, within two working days, when a monitor must be recertified as outlined in Minn. R. 7017.1050, subp. 2. Test plans and reports must be submitted in a format specified by the commissioner. [Minn. R. 7017.1060, subp. 1-3, Minn. R. 7017.1080]
6.29.4	CEMS Certification/Recertification Test: due 90 days after the first excess emissions report required for the CEMS or any change which invalidates the monitor's certification status as outlined in Minn. R. 7017.1050, subp. 2. [Minn. R. 7017.1050, subp. 1]
6.29.5	The Permittee shall conduct CEMS cylinder gas audit (CGA): Due by the end of every second QA operating quarter (calendar quarter in which there are at least 168 unit operating hours) except that a CGA is not required during any quarter in which a RATA is performed. The initial CGA must be performed within 180 days following certification of the CEMS. The CGAs shall be conducted according to the procedures outlined in Minn. R. 7017.1170, subp 4a(A). If the monitored emission unit is not in operation on the CGA due date, the owner or operator has a grace period of 168 operating hours to

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	perform the CGA. [Minn. R. 7017.1170, subp. 4a]
6.29.6	Cylinder Gas Audit (CGA) Results Summary: due 30 days after end of each calendar quarter in which a CGA was conducted. [Minn. R. 7017.1180, subp. 1]
6.29.7	Relative Accuracy Test Audit (RATA) Notification: due 30 days before CEMS Relative Accuracy Test Audit (RATA). [Minn. R. 7017.1180, subp. 2]
6.29.8	The Permittee shall conduct a relative accuracy test audit: Due by the end of every fourth QA operating quarter (calendar quarter in which there are at least 168 unit operating hours). RATAs shall be conducted and frequency may be reduced according to the procedures outlined in Minn. R. 7017.1170, subp. 5a. If the monitored emission unit is not in operation on the RATA due date, the owner or operator has a grace period of 720 operating hours to perform the RATA. [Minn. R. 7017.1170, subp. 5a]
6.29.9	Relative Accuracy Test Audit (RATA) Results Summary: due 30 days after end of each calendar quarter in which a RATA was conducted. [Minn. R. 7017.1180, subp. 3]
EQUI 37	**Hearth Layer Baghouse Leak Detector**
6.30.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 114, EQUI 124, and EQUI 135 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 41	**Indurating Furnace Hood Exhaust Stack O2 CEMS**
6.31.1	The Permittee shall submit start-up notification: Due 10 working days after Startup of Monitor Date. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 2]
6.31.2	Installation Notification: due 60 days before installing the continuous emissions monitoring system. The notification shall include plans and drawings of the system. [Minn. R. 7017.1040, subp. 1]
6.31.3	Certification Test Plan due 30 days before Certification Test. Certification Test Pretest Meeting due seven days before Certification Test. Certification Test Report due 45 days after Certification Test. Notify the commissioner prior to making any planned change or if unforeseen, within two working days, when a monitor must be recertified as outlined in Minn. R. 7017.1050, subp. 2. Test plans and reports must be submitted in a format specified by the commissioner. [Minn. R. 7017.1060, subp. 1-3, Minn. R. 7017.1080]
6.31.4	CEMS Certification/Recertification Test: due 90 days after the first excess emissions report required for the CEMS or any change which invalidates the monitor's certification status as outlined in Minn. R. 7017.1050, subp. 2. [Minn. R. 7017.1050, subp. 1]
6.31.5	The Permittee shall conduct CEMS cylinder gas audit (CGA): Due by the end of every second QA operating quarter (calendar quarter in which there are at least 168 unit operating hours) except that a CGA is not required during any quarter in which a RATA is performed. The initial CGA must be performed within 180 days following certification of the CEMS. The CGAs shall be conducted according to the procedures outlined in Minn. R. 7017.1170, subp 4a(A). If the monitored emission unit is not in operation on the CGA due date, the owner or operator has a grace period of 168 operating hours to perform the CGA. [Minn. R. 7017.1170, subp. 4a]
6.31.6	Cylinder Gas Audit (CGA) Results Summary: due 30 days after end of each calendar quarter in which a CGA was conducted. [Minn. R. 7017.1180, subp. 1]
6.31.7	Relative Accuracy Test Audit (RATA) Notification: due 30 days before CEMS Relative Accuracy Test

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	Audit (RATA). [Minn. R. 7017.1180, subp. 2]
6.31.8	The Permittee shall conduct a relative accuracy test audit: Due by the end of every fourth QA operating quarter (calendar quarter in which there are at least 168 unit operating hours). RATAs shall be conducted and frequency may be reduced according to the procedures outlined in Minn. R. 7017.1170, subp. 5a. If the monitored emission unit is not in operation on the RATA due date, the owner or operator has a grace period of 720 operating hours to perform the RATA. [Minn. R. 7017.1170, subp. 5a]
6.31.9	Relative Accuracy Test Audit (RATA) Results Summary: due 30 days after end of each calendar quarter in which a RATA was conducted. [Minn. R. 7017.1180, subp. 3]
EQUI 43	**Indurating Furnace Hood Exhaust Stack NOx CEMS**
6.32.1	Installation Notification: due 60 days before installing the continuous emissions monitoring system. The notification shall include plans and drawings of the system. [Minn. R. 7017.1040, subp. 1]
6.32.2	The Permittee shall submit start-up notification: Due 10 working days after Startup of Monitor Date. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 2]
6.32.3	Certification Test Plan due 30 days before Certification Test. Certification Test Pretest Meeting due seven days before Certification Test. Certification Test Report due 45 days after Certification Test. Notify the commissioner prior to making any planned change or if unforeseen, within two working days, when a monitor must be recertified as outlined in Minn. R. 7017.1050, subp. 2. Test plans and reports must be submitted in a format specified by the commissioner. [Minn. R. 7017.1060, subp. 1-3, Minn. R. 7017.1080]
6.32.4	CEMS Certification/Recertification Test: due 90 days after the first excess emissions report required for the CEMS or any change which invalidates the monitor's certification status as outlined in Minn. R. 7017.1050, subp. 2. [Minn. R. 7017.1050, subp. 1]
6.32.5	The Permittee shall conduct CEMS cylinder gas audit (CGA): Due by the end of every second QA operating quarter (calendar quarter in which there are at least 168 unit operating hours) except that a CGA is not required during any quarter in which a RATA is performed. The initial CGA must be performed within 180 days following certification of the CEMS. The CGAs shall be conducted according to the procedures outlined in Minn. R. 7017.1170, subp 4a(A). If the monitored emission unit is not in operation on the CGA due date, the owner or operator has a grace period of 168 operating hours to perform the CGA. [Minn. R. 7017.1170, subp. 4a]
6.32.6	Cylinder Gas Audit (CGA) Results Summary: due 30 days after end of each calendar quarter in which a CGA was conducted. [Minn. R. 7017.1180, subp. 1]
6.32.7	Relative Accuracy Test Audit (RATA) Notification: due 30 days before CEMS Relative Accuracy Test Audit (RATA). [Minn. R. 7017.1180, subp. 2]
6.32.8	The Permittee shall conduct a relative accuracy test audit: Due by the end of every fourth QA operating quarter (calendar quarter in which there are at least 168 unit operating hours). RATAs shall be conducted and frequency may be reduced according to the procedures outlined in Minn. R. 7017.1170, subp. 5a. If the monitored emission unit is not in operation on the RATA due date, the owner or operator has a grace period of 720 operating hours to perform the RATA. [Minn. R. 7017.1170, subp. 5a]
6.32.9	Relative Accuracy Test Audit (RATA) Results Summary: due 30 days after end of each calendar quarter in which a RATA was conducted. [Minn. R. 7017.1180, subp. 3]
EQUI 45	**Indurating Furnace Hood Exhaust Baghouse Leak Detector**
6.33.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 257 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA

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	guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 46	**Indurating Furnace Waste Gas Baghouse 1 Leak Detector**
6.34.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 258 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 47	**Indurating Furnace Waste Gas Stack O2 CEMS**
6.35.1	Installation Notification: due 60 days before installing the continuous emissions monitoring system. The notification shall include plans and drawings of the system. [Minn. R. 7017.1040, subp. 1]
6.35.2	The Permittee shall submit start-up notification: Due 10 working days after Startup of Monitor Date. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 2]
6.35.3	Certification Test Plan due 30 days before Certification Test. Certification Test Pretest Meeting due seven days before Certification Test. Certification Test Report due 45 days after Certification Test. Notify the commissioner prior to making any planned change or if unforeseen, within two working days, when a monitor must be recertified as outlined in Minn. R. 7017.1050, subp. 2. Test plans and reports must be submitted in a format specified by the commissioner. [Minn. R. 7017.1060, subp. 1-3, Minn. R. 7017.1080]
6.35.4	CEMS Certification/Recertification Test: due 90 days after the first excess emissions report required for the CEMS or any change which invalidates the monitor's certification status as outlined in Minn. R. 7017.1050, subp. 2. [Minn. R. 7017.1050, subp. 1]
6.35.5	The Permittee shall conduct CEMS cylinder gas audit (CGA): Due by the end of every second QA operating quarter (calendar quarter in which there are at least 168 unit operating hours) except that a CGA is not required during any quarter in which a RATA is performed. The initial CGA must be performed within 180 days following certification of the CEMS. The CGAs shall be conducted according to the procedures outlined in Minn. R. 7017.1170, subp 4a(A). If the monitored emission unit is not in operation on the CGA due date, the owner or operator has a grace period of 168 operating hours to perform the CGA. [Minn. R. 7017.1170, subp. 4a]
6.35.6	Cylinder Gas Audit (CGA) Results Summary: due 30 days after end of each calendar quarter in which a CGA was conducted. [Minn. R. 7017.1180, subp. 1]
6.35.7	Relative Accuracy Test Audit (RATA) Notification: due 30 days before CEMS Relative Accuracy Test Audit (RATA). [Minn. R. 7017.1180, subp. 2]
6.35.8	The Permittee shall conduct a relative accuracy test audit: Due by the end of every fourth QA operating quarter (calendar quarter in which there are at least 168 unit operating hours). RATAs shall be conducted and frequency may be reduced according to the procedures outlined in Minn. R. 7017.1170, subp. 5a. If the monitored emission unit is not in operation on the RATA due date, the owner or operator has a grace period of 720 operating hours to perform the RATA. [Minn. R. 7017.1170, subp. 5a]
6.35.9	Relative Accuracy Test Audit (RATA) Results Summary: due 30 days after end of each calendar quarter in which a RATA was conducted. [Minn. R. 7017.1180, subp. 3]
EQUI 49	**Indurating Furnace Waste Gas Stack NOx CEMS**

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6.36.1	Installation Notification: due 60 days before installing the continuous emissions monitoring system. The notification shall include plans and drawings of the system. [Minn. R. 7017.1040, subp. 1]
6.36.2	The Permittee shall submit start-up notification: Due 10 working days after Startup of Monitor Date. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 2]
6.36.3	Certification Test Plan due 30 days before Certification Test. Certification Test Pretest Meeting due seven days before Certification Test. Certification Test Report due 45 days after Certification Test. Notify the commissioner prior to making any planned change or if unforeseen, within two working days, when a monitor must be recertified as outlined in Minn. R. 7017.1050, subp. 2. Test plans and reports must be submitted in a format specified by the commissioner. [Minn. R. 7017.1060, subp. 1-3, Minn. R. 7017.1080]
6.36.4	CEMS Certification/Recertification Test: due 90 days after the first excess emissions report required for the CEMS or any change which invalidates the monitor's certification status as outlined in Minn. R. 7017.1050, subp. 2. [Minn. R. 7017.1050, subp. 1]
6.36.5	The Permittee shall conduct CEMS cylinder gas audit (CGA): Due by the end of every second QA operating quarter (calendar quarter in which there are at least 168 unit operating hours) except that a CGA is not required during any quarter in which a RATA is performed. The initial CGA must be performed within 180 days following certification of the CEMS. The CGAs shall be conducted according to the procedures outlined in Minn. R. 7017.1170, subp 4a(A). If the monitored emission unit is not in operation on the CGA due date, the owner or operator has a grace period of 168 operating hours to perform the CGA. [Minn. R. 7017.1170, subp. 4a]
6.36.6	Cylinder Gas Audit (CGA) Results Summary: due 30 days after end of each calendar quarter in which a CGA was conducted. [Minn. R. 7017.1180, subp. 1]
6.36.7	Relative Accuracy Test Audit (RATA) Notification: due 30 days before CEMS Relative Accuracy Test Audit (RATA). [Minn. R. 7017.1180, subp. 2]
6.36.8	The Permittee shall conduct a relative accuracy test audit: Due by the end of every fourth QA operating quarter (calendar quarter in which there are at least 168 unit operating hours). RATAs shall be conducted and frequency may be reduced according to the procedures outlined in Minn. R. 7017.1170, subp. 5a. If the monitored emission unit is not in operation on the RATA due date, the owner or operator has a grace period of 720 operating hours to perform the RATA. [Minn. R. 7017.1170, subp. 5a]
6.36.9	Relative Accuracy Test Audit (RATA) Results Summary: due 30 days after end of each calendar quarter in which a RATA was conducted. [Minn. R. 7017.1180, subp. 3]
EQUI 51	**Pellet Discharge Baghouse Leak Detector**
6.37.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 127 and EQUI 135 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 53	**Hearth Layer Separation Baghouse Leak Detector**
6.38.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 135 and EQUI 259 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak

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	detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 110	**Coarse Ore Mill Bay Tunnel 1**
6.39.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.39.2	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.39.3	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date.

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	For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a)(1), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(a), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.39.4	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.39.5	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date

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	requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.39.6	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.39.7	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.39.8	Filterable Particulate Matter: The Permittee shall submit a performance test notification: Due 60 calendar days before the filterable particulate matter performance test is initially scheduled to begin. [40 CFR 63.7(b), 40 CFR 63.9640(d), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A)]
6.39.9	Filterable Particulate Matter: The Permittee shall submit the performance test results: Due 60 days after the completion of each performance test required by 40 CFR pt. 63, subp. RRRRR, following the procedures specified in 40 CFR 63.9641(f)(1) through (3). [40 CFR 63.9641(f), Minn. R. 7011.8030]
6.39.10	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.39.11	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 111	**Fine Ore Mill Bay Tunnel 1A**
6.40.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test

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	date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.40.2	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.40.3	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a)(1), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(a), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.40.4	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions.

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	The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.40.5	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.40.6	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter.

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	If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.40.7	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.40.8	Filterable Particulate Matter: The Permittee shall submit a performance test notification: Due 60 calendar days before the filterable particulate matter performance test is initially scheduled to begin. [40 CFR 63.7(b), 40 CFR 63.9640(d), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A)]
6.40.9	Filterable Particulate Matter: The Permittee shall submit the performance test results: Due 60 days after the completion of each performance test required by 40 CFR pt. 63, subp. RRRRR, following the procedures specified in 40 CFR 63.9641(f)(1) through (3). [40 CFR 63.9641(f), Minn. R. 7011.8030]
6.40.10	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.40.11	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 112	**Mixing Conveyor**
6.41.1	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.675(b)(1). [40 CFR 60.672(a), 40 CFR 60.675(a), 40 CFR 60.675(b)(1), 40 CFR 60.8(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.41.2	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.676(i), 40 CFR 60.7(a)(3), 40 CFR 63.9(b)(4)(v), Minn. R. 7011.3350, Minn. R. 7019.0100, subp. 1, Minn. R. 7019.0100, subp. 2(A)]
EQUI 113	**Mixer**
6.42.1	Process Throughput: The Permittee must submit an annual report by the 31st of January after the initial startup date of mining operations. The report must document the 12-month rolling sum concentrate process throughput calculations for the previous calendar year. The report must be

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	submitted with the annual Compliance Certification required by this permit. [Minn. R. 7007.0800, subp. 16(L)]
6.42.2	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 63.9(b)(4)(v), Minn. R. 7019.0100, subp. 2(A)]
EQUI 114	**Hearth Layer Grate Feed**
6.43.1	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.43.2	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.43.3	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.43.4	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 122	**Mercury Control Carbon Bin**
6.44.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.44.2	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions.

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	The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.44.3	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.44.4	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for

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	an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.44.5	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
EQUI 123	**Scrubber Control Lime Bin**
6.45.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.45.2	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005,

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	subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.45.3	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.45.4	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing.

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	Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.45.5	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
EQUI 124	**Hearth Layer Feed Bin**
6.46.1	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.46.2	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.46.3	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.46.4	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 127	**Pellet Discharge**
6.47.1	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.47.2	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.47.3	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.47.4	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 131	**Primary Ore Crusher**
6.48.1	Process Throughput: The Permittee must submit an annual report by the 31st of January after the

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	initial startup date of mining operations. The report must document the 12-month rolling sum crude ore process throughput calculations for the previous calendar year. The report must be submitted with the annual Compliance Certification required by this permit. [Minn. R. 7007.0800, subp. 16(L)]
6.48.2	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.48.3	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.48.4	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.48.5	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 132	**Grizzly Scalping Screen**
6.49.1	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.49.2	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.49.3	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days

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	after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a)(1), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(a), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.49.4	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.49.5	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions.

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	The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.49.6	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.49.7	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.49.8	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days

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	after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.49.9	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 135	**Pellet Transfer to Hearth Layer Bin**
6.50.1	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.50.2	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.50.3	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.50.4	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 138	**Concentrator Fire Water Supply Pump**
6.51.1	The Permittee shall submit a notification of date construction began: Due 30 calendar days after Date of Construction Start (or reconstruction). Submit the name and number of the Subject Item and the date construction began. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
6.51.2	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), 40 CFR 63.6590(c), Minn. R. 7011.8150, Minn. R. 7019.0100, subp. 1]
EQUI 139	**Concentrator Emergency Power Generator**
6.52.1	The Permittee shall submit a notification of date construction began: Due 30 calendar days after Date of Construction Start (or reconstruction). Submit the name and number of the Subject Item and the date construction began. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
6.52.2	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.52.3	The Permittee shall submit an initial notification: Due 120 days after Initial Startup Date of EQUI 139. The initial notification must include the information in 40 CFR 63.9(b)(2)(i) through (v) and a statement that the stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions). [40 CFR 63.6645(f), Minn. R. 7011.8150]
6.52.4	If the emergency stationary engine operates for the purposes specified in 40 CFR 60.4211(f)(3)(i), the

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	Permittee must submit an annual report for each calendar year no later than March 31 of the following calendar year. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emission Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/). However, if the reporting form not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in 40 CFR 60.4 and emailed to the MPCA as directed in Section 2 of this permit for other compliance submittals. Beginning on February 26, 2025, submit the annual report electronically according to 40 CFR 60.4214(g). [40 CFR 60.4214(d), 40 CFR 60.4214(g), Minn. R. 7011.2305]
EQUI 140	**Coarse Ore Storage Conveyor**
6.53.1	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.53.2	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.53.3	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.53.4	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 141	**Fine Ore Storage Conveyor**
6.54.1	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.54.2	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.54.3	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.54.4	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 149	**Pellet Plant Emergency Power Generator**

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6.55.1	The Permittee shall submit a notification of date construction began: Due 30 calendar days after Date of Construction Start (or reconstruction). Submit the name and number of the Subject Item and the date construction began. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
6.55.2	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.55.3	The Permittee shall submit an initial notification: Due 120 days after Initial Startup Date of EQUI 149. The initial notification must include the information in 40 CFR 63.9(b)(2)(i) through (v) and a statement that the stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions). [40 CFR 63.6645(f), Minn. R. 7011.8150]
6.55.4	If the emergency stationary engine operates for the purposes specified in 40 CFR 60.4211(f)(3)(i), the Permittee must submit an annual report for each calendar year no later than March 31 of the following calendar year. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emission Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/). However, if the reporting form not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in 40 CFR 60.4 and emailed to the MPCA as directed in Section 2 of this permit for other compliance submittals. Beginning on February 26, 2025, submit the annual report electronically according to 40 CFR 60.4214(g). [40 CFR 60.4214(d), 40 CFR 60.4214(g), Minn. R. 7011.2305]
EQUI 191	**Limestone Bin**
6.56.1	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.675(b)(2) and (c)(2). [40 CFR 60.672(a), 40 CFR 60.675(b)(2), 40 CFR 60.675(c)(2), 40 CFR 60.8(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.56.2	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.676(i), 40 CFR 60.7(a)(3), 40 CFR 63.9(b)(4)(v), Minn. R. 7011.3350, Minn. R. 7019.0100, subp. 1, Minn. R. 7019.0100, subp. 2(A)]
6.56.3	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 193	**Organic Binder Bin**
6.57.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 63.9(b)(4)(v), Minn. R. 7019.0100, subp. 2(A)]
EQUI 214	**Sodium Carbonate Bin**
6.58.1	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.675(b)(1). [40 CFR 60.672(a), 40 CFR 60.675(a), 40 CFR 60.675(b)(1), 40 CFR

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	60.8(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.58.2	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.676(i), 40 CFR 60.7(a)(3), 40 CFR 63.9(b)(4)(v), Minn. R. 7011.3350, Minn. R. 7019.0100, subp. 1, Minn. R. 7019.0100, subp. 2(A)]
EQUI 217	**Grizzly Transfer Tower Baghouse Leak Detector**
6.59.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 251 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 218	**Cobber Rejects Transfer Tower Baghouse Leak Detector**
6.60.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 252 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 219	**Secondary Crusher Line 1 Baghouse Leak Detector**
6.61.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 253 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 220	**Secondary Crusher Line 2 Baghouse Leak Detector**
6.62.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 254 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 221	**Secondary Crusher Line 3 Baghouse Leak Detector**
6.63.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 255 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 222	**Coarse Ore Storage Conveyor Baghouse Leak Detector**
6.64.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 140 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be

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	consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 223	**Ore Dumping Baghouse Leak Detector**
6.65.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 262 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 224	**Grizzly Scalping Screen Baghouse Leak Detector**
6.66.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 132 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 225	**Fine Ore Storage Conveyor Baghouse Leak Detector**
6.67.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 141 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 226	**Coarse Ore Mill Bay Tunnel 1 Baghouse Leak Detector**
6.68.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 110 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 227	**Fine Ore Mill Bay Tunnel 1A Baghouse Leak Detector**
6.69.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 111 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 233	**Product Junction House 4 Baghouse Leak Detector**
6.70.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 331 and EQUI 347 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015)

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	(incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 247	**Secondary Crusher Line 4 Baghouse Leak Detector**
6.71.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 256 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 251	**Grizzly Transfer Tower**
6.72.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.72.2	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.72.3	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit.

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	The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a)(1), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(a), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.72.4	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.72.5	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit.

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	The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.72.6	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.72.7	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.72.8	Filterable Particulate Matter: The Permittee shall submit a performance test notification: Due 60 calendar days before the filterable particulate matter performance test is initially scheduled to begin. [40 CFR 63.7(b), 40 CFR 63.9640(d), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A)]
6.72.9	Filterable Particulate Matter: The Permittee shall submit the performance test results: Due 60 days after the completion of each performance test required by 40 CFR pt. 63, subp. RRRRR, following the procedures specified in 40 CFR 63.9641(f)(1) through (3). [40 CFR 63.9641(f), Minn. R. 7011.8030]
6.72.10	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.72.11	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due

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	30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 252	**Cobber Rejects Transfer Tower**
6.73.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.73.2	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.73.3	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter

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	concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a)(1), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(a), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.73.4	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.73.5	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]

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6.73.6	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.73.7	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.73.8	Filterable Particulate Matter: The Permittee shall submit a performance test notification: Due 60 calendar days before the filterable particulate matter performance test is initially scheduled to begin. [40 CFR 63.7(b), 40 CFR 63.9640(d), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A)]
6.73.9	Filterable Particulate Matter: The Permittee shall submit the performance test results: Due 60 days after the completion of each performance test required by 40 CFR pt. 63, subp. RRRRR, following the procedures specified in 40 CFR 63.9641(f)(1) through (3). [40 CFR 63.9641(f), Minn. R. 7011.8030]
6.73.10	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.73.11	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 253	**Secondary Crusher Line 1**
6.74.1	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.74.2	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup

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	Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.74.3	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.74.4	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 254	**Secondary Crusher Line 2**
6.75.1	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.75.2	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.75.3	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.75.4	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 255	**Secondary Crusher Line 3**
6.76.1	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.76.2	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.76.3	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.76.4	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due

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	30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 256	**Secondary Crusher Line 4**
6.77.1	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.77.2	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.77.3	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.77.4	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 257	**Indurating Furnace Hood Exhaust**
6.78.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.78.2	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 24 months thereafter to measure emissions. The first test is due by the date specified above and all subsequent tests must be completed every 24 months thereafter by the due date (month and day) and as described below. The performance test must be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, or other method approved by MPCA in the performance test plan approval.

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	The performance tests for EQUI 257 and EQUI 258 must be completed within seven calendar days of commencement of the performance tests, to the extent practicable, and the indurating furnace and associated control device (where applicable) operating characteristics must remain representative and consistent for the duration of the stack tests. If the Permittee determines that the performance tests cannot be conducted within seven calendar days, the Administrator must be notified within 24 hours of making that determination. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. For 40 CFR pt. 63, subp. RRRRR, Each Method 5 or 5D performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. [40 CFR 63.7, 40 CFR 63.9620(b), 40 CFR 63.9621(a), 40 CFR 63.9621(c)(1) & (2), 40 CFR 63.9630(b), 40 CFR 63.9634(c)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.78.3	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.78.4	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval.

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	Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.78.5	Sulfuric Acid Mist: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure the sulfuric acid mist to sulfur dioxide ratio of 0.006 mol/mol. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 8, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.78.6	Volatile Organic Compounds: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 25A or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.78.7	Lead: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall

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	be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 29 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.78.8	Fluorides: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 13A, 13B, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.78.9	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this

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	test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.78.10	TCDD - TE: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 12 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 12-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 23 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Minn. R. 7017.2020, subp. 1]
6.78.11	The Permittee must submit a performance test notification: Due 60 calendar days before each performance test required by 40 CFR pt. 63, subp. RRRRR is scheduled to begin. [40 CFR 63.7(b), 40 CFR 63.9640(d), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A)]
6.78.12	The Permittee must submit the performance test results: Due 60 days after the completion of each performance test required by 40 CFR pt. 63, subp. RRRRR, following the procedures specified in 40 CFR 63.9641(f)(1) through (3). [40 CFR 63.9641(f), Minn. R. 7011.8030]
6.78.13	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
EQUI 258	**Indurating Furnace Waste Gas**
6.79.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT)

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	& Minn. R. 7007.3000]
6.79.2	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 24 months thereafter to measure emissions. The first test is due by the date specified above and all subsequent tests must be completed every 24 months thereafter by the due date (month and day) and as described below. The performance test must be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, or other method approved by MPCA in the performance test plan approval. The performance tests for EQUI 257 and EQUI 258 must be completed within seven calendar days of commencement of the performance tests, to the extent practicable, and the indurating furnace and associated control device (where applicable) operating characteristics must remain representative and consistent for the duration of the stack tests. If the Permittee determines that the performance tests cannot be conducted within seven calendar days, the Administrator must be notified within 24 hours of making that determination. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. For 40 CFR pt. 63, subp. RRRRR, Each Method 5 or 5D performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. [40 CFR 63.7, 40 CFR 63.9620(b), 40 CFR 63.9621(a), 40 CFR 63.9621(c)(1) & (2), 40 CFR 63.9630(b), 40 CFR 63.9634(c)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.79.3	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.79.4	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or

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	Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.79.5	Sulfuric Acid Mist: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure the sulfuric acid mist to sulfur dioxide ratio of 0.006 mol/mol. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 8, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.79.6	Volatile Organic Compounds: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 25A, or other method approved by MPCA in the performance test plan approval.

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	Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.79.7	Lead: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 29 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.79.8	Fluorides: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 13A, 13B, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.79.9	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at

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	less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date.[Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.79.10	TCDD - TE: The Permittee shall conduct an initial performance test due 180 days after Initial Startup Date and every 12 months thereafter to verify the emission factor of 1.16E-12 lb/MMBtu heat input. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 12-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 23 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Minn. R. 7017.2020, subp. 1]
6.79.11	The Permittee must submit a performance test notification: Due 60 calendar days before each performance test required by 40 CFR pt. 63, subp. RRRRR is scheduled to begin. [40 CFR 63.7(b), 40 CFR 63.9640(d), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A)]
6.79.12	The Permittee must submit the performance test results: Due 60 days after the completion of each performance test required by 40 CFR pt. 63, subp. RRRRR, following the procedures specified in 40 CFR 63.9641(f)(1) through (3). [40 CFR 63.9641(f), Minn. R. 7011.8030]
6.79.13	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
EQUI 259	**Hearth Layer Separation**
6.80.1	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.80.2	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined

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	at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.80.3	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.80.4	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 261	**Space Heaters**
6.81.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
EQUI 262	**Ore Dumping to Crusher**
6.82.1	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.82.2	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.82.3	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test

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	frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(a), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.82.4	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.82.5	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit.

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	The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.82.6	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.82.7	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.82.8	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.82.9	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 263	**Coarse Ore Barn Pile Drop**
6.83.1	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn.

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	R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.83.2	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.83.3	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.83.4	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 264	**Fine Ore Barn Pile Drop**
6.84.1	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.84.2	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.84.3	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.84.4	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 266	**Pellet Plant Fire Water Supply Pump**
6.85.1	The Permittee shall submit a notification of date construction began: Due 30 calendar days after Date of Construction Start (or reconstruction). Submit the name and number of the Subject Item and the date construction began. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
6.85.2	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), 40 CFR 63.6590(c), Minn. R. 7011.8150, Minn. R. 7019.0100, subp. 1]
6.85.3	If the emergency stationary engine operates for the purposes specified in 40 CFR 60.4211(f)(3)(i), the Permittee must submit an annual report for each calendar year no later than March 31 of the following calendar year. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/). However, if the reporting form not

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	available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in 40 CFR 60.4 and emailed to the MPCA as directed in Section 2 of this permit for other compliance submittals. Beginning on February 26, 2025, submit the annual report electronically according to 40 CFR 60.4214(g). [40 CFR 60.4214(d), 40 CFR 60.4214(g), 40 CFR 63.6590(c), Minn. R. 7011.2305, Minn. R. 7011.8150]
EQUI 281	**Residual Silo**
6.86.1	Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.86.2	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.86.3	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions.

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	The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.86.4	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.86.5	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
EQUI 282	**Dolomite Bin**
6.87.1	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan

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	approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.675(b)(2) and (c)(2). [40 CFR 60.672(a), 40 CFR 60.675(b)(2), 40 CFR 60.675(c)(2), 40 CFR 60.8(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.87.2	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.676(i), 40 CFR 60.7(a)(3), Minn. R. 7011.3350, Minn. R. 7019.0100, subp. 1]
6.87.3	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 283	**Bentonite Bin**
6.88.1	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.675(b)(2) and (c)(2). [40 CFR 60.672(a), 40 CFR 60.675(b)(2), 40 CFR 60.675(c)(2), 40 CFR 60.8(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.88.2	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.676(j), 40 CFR 60.7(a)(3), Minn. R. 7011.3350, Minn. R. 7019.0100, subp. 1]
6.88.3	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 284	**Storage Bin 1**
6.89.1	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.675(b)(2) and (c)(2). [40 CFR 60.672(a), 40 CFR 60.675(b)(2), 40 CFR 60.675(c)(2), 40 CFR 60.8(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.89.2	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.676(i), 40 CFR 60.7(a)(3), Minn. R. 7011.3350, Minn. R. 7019.0100, subp. 1]
6.89.3	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 285	**Storage Bin 2**
6.90.1	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.675(b)(2) and (c)(2). [40 CFR 60.672(a), 40 CFR 60.675(b)(2), 40 CFR 60.675(c)(2), 40 CFR 60.8(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.90.2	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.676(i), 40 CFR 60.7(a)(3), Minn. R. 7011.3350, Minn. R. 7019.0100, subp. 1]

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6.90.3	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 286	**Product Junction House 2**
6.91.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.91.2	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.91.3	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date.

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	For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(c), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.91.4	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.91.5	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R.

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	7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.91.6	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.91.7	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.91.8	Filterable Particulate Matter: The Permittee shall submit a performance test notification: Due 60 calendar days before the filterable particulate matter performance test is initially scheduled to begin. [40 CFR 63.7(b), 40 CFR 63.9640(d), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A)]
6.91.9	Filterable Particulate Matter: The Permittee shall submit the performance test results: Due 60 days after the completion of each performance test required by 40 CFR pt. 63, subp. RRRRR, following the procedures specified in 40 CFR 63.9641(f)(1) through (3). [40 CFR 63.9641(f), Minn. R. 7011.8030]
6.91.10	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.91.11	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 287	**Product Junction House 3**
6.92.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter.

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	If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.92.2	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.92.3	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(c), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.92.4	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall

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	be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.92.5	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.92.6	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit.

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	The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.92.7	Filterable Particulate Matter: The Permittee shall submit a performance test notification: Due 60 calendar days before the filterable particulate matter performance test is initially scheduled to begin. [40 CFR 63.7(b), 40 CFR 63.9640(d), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A)]
6.92.8	Filterable Particulate Matter: The Permittee shall submit the performance test results: Due 60 days after the completion of each performance test required by 40 CFR pt. 63, subp. RRRRR, following the procedures specified in 40 CFR 63.9641(f)(1) through (3). [40 CFR 63.9641(f), Minn. R. 7011.8030]
6.92.9	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.92.10	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.92.11	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 288	**Bentonite Receiving Bin 3**
6.93.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT)

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	& Minn. R. 7007.3000]
6.93.2	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.93.3	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.93.4	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall

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	be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.93.5	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.675(b)(2) and (c)(2). [40 CFR 60.672(a), 40 CFR 60.675(b)(2), 40 CFR 60.675(c)(2), 40 CFR 60.8(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.93.6	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.656(i), 40 CFR 60.7(a)(3), Minn. R. 7011.3350, Minn. R. 7019.0100, subp. 1]
6.93.7	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 289	**Primary Crusher Building Belt Conveyor**
6.94.1	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, sub. 2(A), Minn. R. 7017.2020, subp. 1]
6.94.2	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.94.3	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.94.4	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]

Requirement number	Requirement and citation
EQUI 290	**Pneumatic Transport Vent 1**
6.95.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.95.2	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.675(b)(1). [40 CFR 60.672(a), 40 CFR 60.675(a), 40 CFR 60.675(b)(1), 40 CFR 60.8(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.95.3	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R.

Requirement number	Requirement and citation
	7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.95.4	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.95.5	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.95.6	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.676(i), 40 CFR 60.7(a)(3), Minn. R. 7011.3350, Minn. R. 7019.0100, subp. 1]
EQUI 291	**Pneumatic Transport Vent 2**

Requirement number	Requirement and citation
6.96.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.96.2	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.675(b)(1). [40 CFR 60.672(a), 40 CFR 60.675(a), 40 CFR 60.675(b)(1), 40 CFR 60.8(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.96.3	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]

Requirement number	Requirement and citation
6.96.4	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.96.5	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.96.6	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.676(j), 40 CFR 60.7(a)(3), Minn. R. 7011.3350, Minn. R. 7019.0100, subp. 1]
EQUI 293	**Rotary Rail Car Dumper**
6.97.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar

Requirement number	Requirement and citation
	days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.97.2	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.675(b)(1). [40 CFR 60.672(a), 40 CFR 60.675(a), 40 CFR 60.675(b)(1), 40 CFR 60.8(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.97.3	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.97.4	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after

Requirement number	Requirement and citation
	Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.97.5	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.97.6	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.676(i), 40 CFR 60.7(a)(3), Minn. R. 7011.3350, Minn. R. 7019.0100, subp. 1]
EQUI 294	**2100 Tonne Stone Bin**
6.98.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions.

Requirement number	Requirement and citation
	The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.98.2	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.98.3	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit.

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	The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.98.4	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.98.5	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.675(b)(2) and (c)(2). [40 CFR 60.672(a), 40 CFR 60.675(b)(2), 40 CFR 60.675(c)(2), 40 CFR 60.8(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.98.6	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.676(i), 40 CFR 60.7(a)(3), Minn. R. 7011.3350, Minn. R. 7019.0100, subp. 1]
6.98.7	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 295	**5500 Tonne Limestone Storage Bin**
6.99.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions.

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	The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.99.2	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.99.3	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major

Requirement number	Requirement and citation
	amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.99.4	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.99.5	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.675(b)(2) and (c)(2). [40 CFR 60.672(a), 40 CFR 60.675(b)(2), 40 CFR 60.675(c)(2), 40 CFR 60.8(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.99.6	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.676(i), 40 CFR 60.7(a)(3), Minn. R. 7011.3350, Minn. R. 7019.0100, subp. 1]
6.99.7	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 296	**5500 Tonne Dolomite Storage Bin**
6.100.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar

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	days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.100.2	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.100.3	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for

Requirement number	Requirement and citation
	an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.100.4	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.100.5	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.675(b)(2) and (c)(2). [40 CFR 60.672(a), 40 CFR 60.675(b)(2), 40 CFR 60.675(c)(2), 40 CFR 60.8(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.100.6	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.676(i), 40 CFR 60.7(a)(3), Minn. R. 7011.3350, Minn. R. 7019.0100, subp. 1]
6.100.7	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 297	**Train Unloading Conveyor**

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6.101.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.101.2	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.675(b)(1). [40 CFR 60.672(a), 40 CFR 60.675(a), 40 CFR 60.675(b)(1), 40 CFR 60.8(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.101.3	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]

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6.101.4	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.101.5	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.101.6	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.676(i), 40 CFR 60.7(a)(3), Minn. R. 7011.3350, Minn. R. 7019.0100, subp. 1]
EQUI 298	**Overland Conveyor**
6.102.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar

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	days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.102.2	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.675(b)(1). [40 CFR 60.672(a), 40 CFR 60.675(a), 40 CFR 60.675(b)(1), 40 CFR 60.8(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.102.3	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.102.4	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after

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	Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.102.5	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.102.6	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.676(i), 40 CFR 60.7(a)(3), Minn. R. 7011.3350, Minn. R. 7019.0100, subp. 1]
EQUI 299	**Limestone and Dolomite Grinding Mill**
6.103.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions.

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	The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.103.2	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.675(b)(1). [40 CFR 60.672(a), 40 CFR 60.675(a), 40 CFR 60.675(b)(1), 40 CFR 60.8(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.103.3	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.103.4	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions.

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	The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.103.5	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.103.6	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.676(i), 40 CFR 60.7(a)(3), Minn. R. 7011.3350, Minn. R. 7019.0100, subp. 1]
6.103.7	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 300	**Pellet Bunker Tripper Conveyor**
6.104.1	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case

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	conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.104.2	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.104.3	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.104.4	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 301	**Emergency Reclaim Pump**
6.105.1	The Permittee shall submit a notification of date construction began: Due 30 calendar days after Date of Construction Start (or reconstruction). Submit the name and number of the Subject Item and the date construction began. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
6.105.2	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.105.3	The Permittee shall submit an initial notification: Due 120 days after Initial Startup Date of EQUI 301. The initial notification must include the information in 40 CFR 63.9(b)(2)(i) through (v) and a statement that the stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions). [40 CFR 63.6645(f), Minn. R. 7011.8150]
6.105.4	If the emergency stationary engine operates for the purposes specified in 40 CFR 60.4211(f)(3)(i), the Permittee must submit an annual report for each calendar year no later than March 31 of the following calendar year. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emission Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/). However, if the reporting form not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in 40 CFR 60.4 and emailed to the MPCA as directed in Section 2 of this permit for other compliance submittals. Beginning on February 26, 2025, submit the annual report electronically according to 40 CFR 60.4214(g). [40 CFR 60.4214(d), 40 CFR 60.4214(g), Minn. R. 7011.2305]
EQUI 302	**Emergency Pit Water Pump**
6.106.1	The Permittee shall submit a notification of date construction began: Due 30 calendar days after Date of Construction Start (or reconstruction). Submit the name and number of the Subject Item and the date construction began. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
6.106.2	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR

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	60.7(a)(3), 40 CFR 63.6590(c), Minn. R. 7011.8150, Minn. R. 7019.0100, subp. 1]
6.106.3	If the emergency stationary engine operates for the purposes specified in 40 CFR 60.4211(f)(3)(i), the Permittee must submit an annual report for each calendar year no later than March 31 of the following calendar year. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emission Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/). However, if the reporting form not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in 40 CFR 60.4 and emailed to the MPCA as directed in Section 2 of this permit for other compliance submittals. Beginning on February 26, 2025, submit the annual report electronically according to 40 CFR 60.4214(g). [40 CFR 60.4214(d), 40 CFR 60.4214(g), 40 CFR 63.6590(c), Minn. R. 7011.2305, Minn. R. 7011.8150]
EQUI 303	**Pellet Bunker Product Conveyor**
6.107.1	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.107.2	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.107.3	The Permittee shall submit a notification of date construction began: Due 30 calendar days after Date of Construction Start (or reconstruction). Submit the name and number of the Subject Item and the date construction began. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(1), Minn. R. 7019.0100, subp. 1]
6.107.4	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.107.5	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 304	**55 Tonne Day Bin**
6.108.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit.

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	The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.108.2	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.108.3	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date

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	requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.108.4	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.108.5	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.675(b)(2) and (c)(2). [40 CFR 60.672(a), 40 CFR 60.675(b)(2), 40 CFR 60.675(c)(2), 40 CFR 60.8(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.108.6	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.676(i), 40 CFR 60.7(a)(3), Minn. R. 7011.3350, Minn. R. 7019.0100, subp. 1]
6.108.7	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 305	**Fine Ore Mill Bay Tunnel 1B Baghouse Leak Detector**
6.109.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 335 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 309	**Fine Ore Mill Bay Tunnel 2A Baghouse Leak Detector**
6.110.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 336 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA

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	guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 310	**Product Junction House 1 Baghouse Leak Detector**
6.111.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 330 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 311	**Fine Ore Mill Bay Tunnel 2B Baghouse Leak Detector**
6.112.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 337 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 312	**Fine Ore Mill Bay Tunnel 3A Baghouse Leak Detector**
6.113.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 338 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 313	**Fine Ore Mill Bay Tunnel 3B Baghouse Leak Detector**
6.114.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 339 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 314	**Coarse Ore Mill Bay Tunnel 2 Baghouse Leak Detector**
6.115.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 333 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 315	**Coarse Ore Mill Bay Tunnel 3 Baghouse Leak Detector**
6.116.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 334 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system

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	according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 318	**Product Junction House 2 Baghouse Leak Detector**
6.117.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 286 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 319	**Product Junction House 3 Baghouse Leak Detector**
6.118.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 287 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 320	**Primary Crusher Building Baghouse Leak Detector**
6.119.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 131 and EQUI 289 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 327	**Pellet Bunker Tripper Conveyor Baghouse Leak Detector**
6.120.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 300 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 328	**Pellet Bunker Product Conveyor Baghouse Leak Detector**
6.121.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 303 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 330	**Product Junction House 1**
6.122.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter.

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	If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.122.2	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.122.3	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(c), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.122.4	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or

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	Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.122.5	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.122.6	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major

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	amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.122.7	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.122.8	Filterable Particulate Matter: The Permittee shall submit a performance test notification: Due 60 calendar days before the filterable particulate matter performance test is initially scheduled to begin. [40 CFR 63.7(b), 40 CFR 63.9640(d), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A)]
6.122.9	Filterable Particulate Matter: The Permittee shall submit the performance test results: Due 60 days after the completion of each performance test required by 40 CFR pt. 63, subp. RRRRR, following the procedures specified in 40 CFR 63.9641(f)(1) through (3). [40 CFR 63.9641(f), Minn. R. 7011.8030]
6.122.10	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.122.11	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 331	**Product Junction House 4**
6.123.1	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.123.2	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.123.3	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.123.4	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due

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	30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 332	**Pneumatic Transport Vent 3**
6.124.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.124.2	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.124.3	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test

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	date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.124.4	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.124.5	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
EQUI 333	**Coarse Ore Mill Bay Tunnel 2**
6.125.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter.

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	If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.125.2	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.125.3	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a)(1), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(a), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.125.4	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or

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	Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.125.5	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.125.6	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major

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	amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.125.7	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.125.8	Filterable Particulate Matter: The Permittee shall submit a performance test notification: Due 60 calendar days before the filterable particulate matter performance test is initially scheduled to begin. [40 CFR 63.7(b), 40 CFR 63.9640(d), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A)]
6.125.9	Filterable Particulate Matter: The Permittee shall submit the performance test results: Due 60 days after the completion of each performance test required by 40 CFR pt. 63, subp. RRRRR, following the procedures specified in 40 CFR 63.9641(f)(1) through (3). [40 CFR 63.9641(f), Minn. R. 7011.8030]
6.125.10	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.125.11	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 334	**Coarse Ore Mill Bay Tunnel 3**
6.126.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent

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	performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.126.2	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.126.3	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a)(1), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(a), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.126.4	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval.

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	Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.126.5	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.126.6	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance

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	test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.126.7	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.126.8	Filterable Particulate Matter: The Permittee shall submit a performance test notification: Due 60 calendar days before the filterable particulate matter performance test is initially scheduled to begin. [40 CFR 63.7(b), 40 CFR 63.9640(d), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A)]
6.126.9	Filterable Particulate Matter: The Permittee shall submit the performance test results: Due 60 days after the completion of each performance test required by 40 CFR pt. 63, subp. RRRRR, following the procedures specified in 40 CFR 63.9641(f)(1) through (3). [40 CFR 63.9641(f), Minn. R. 7011.8030]
6.126.10	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.126.11	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 335	**Fine Ore Mill Bay Tunnel 1B**
6.127.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.127.2	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (B), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.127.3	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days

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	after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a)(1), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(a), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.127.4	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.127.5	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions.

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	The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.127.6	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.127.7	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.127.8	Filterable Particulate Matter: The Permittee shall submit a performance test notification: Due 60

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	calendar days before the filterable particulate matter performance test is initially scheduled to begin. [40 CFR 63.7(b), 40 CFR 63.9640(d), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A)]
6.127.9	Filterable Particulate Matter: The Permittee shall submit the performance test results: Due 60 days after the completion of each performance test required by 40 CFR pt. 63, subp. RRRRR, following the procedures specified in 40 CFR 63.9641(f)(1) through (3). [40 CFR 63.9641(f), Minn. R. 7011.8030]
6.127.10	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.127.11	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 336	**Fine Ore Mill Bay Tunnel 2A**
6.128.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.128.2	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.128.3	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005,

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	subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a)(1), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(a), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.128.4	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.128.5	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005,

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	subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.300]
6.128.6	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.128.7	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.128.8	Filterable Particulate Matter: The Permittee shall submit a performance test notification: Due 60 calendar days before the filterable particulate matter performance test is initially scheduled to begin. [40 CFR 63.7(b), 40 CFR 63.9640(d), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A)]
6.128.9	Filterable Particulate Matter: The Permittee shall submit the performance test results: Due 60 days after the completion of each performance test required by 40 CFR pt. 63, subp. RRRRR, following the procedures specified in 40 CFR 63.9641(f)(1) through (3). [40 CFR 63.9641(f), Minn. R. 7011.8030]
6.128.10	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.128.11	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]

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EQUI 337	**Fine Ore Mill Bay Tunnel 2B**
6.129.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.129.2	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.129.3	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40

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	CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a)(1), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(a), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.129.4	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.129.5	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.129.6	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial

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	Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.129.7	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.129.8	Filterable Particulate Matter: The Permittee shall submit a performance test notification: Due 60 calendar days before the filterable particulate matter performance test is initially scheduled to begin. [40 CFR 63.7(b), 40 CFR 63.9640(d), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A)]
6.129.9	Filterable Particulate Matter: The Permittee shall submit the performance test results: Due 60 days after the completion of each performance test required by 40 CFR pt. 63, subp. RRRRR, following the procedures specified in 40 CFR 63.9641(f)(1) through (3). [40 CFR 63.9641(f), Minn. R. 7011.8030]
6.129.10	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.129.11	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 338	**Fine Ore Mill Bay Tunnel 3A**
6.130.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major

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	amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.130.2	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.130.3	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a)(1), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(a), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.130.4	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test

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	date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.130.5	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.130.6	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit.

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	The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.130.7	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, Minn. R. 7017.2020, subp. 1]
6.130.8	Filterable Particulate Matter: The Permittee shall submit a performance test notification: Due 60 calendar days before the filterable particulate matter performance test is initially scheduled to begin. [40 CFR 63.7(b), 40 CFR 63.9640(d), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A)]
6.130.9	Filterable Particulate Matter: The Permittee shall submit the performance test results: Due 60 days after the completion of each performance test required by 40 CFR pt. 63, subp. RRRRR, following the procedures specified in 40 CFR 63.9641(f)(1) through (3). [40 CFR 63.9641(f), Minn. R. 7011.8030]
6.130.10	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.130.11	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 339	**Fine Ore Mill Bay Tunnel 3B**
6.131.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]

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6.131.2	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.131.3	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a)(1), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(a), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.131.4	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date

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	for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.131.5	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.131.6	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]

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6.131.7	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2020, subp. 1, Minn. R. 7017.2150, subp. 2(A)]
6.131.8	Filterable Particulate Matter: The Permittee shall submit a performance test notification: Due 60 calendar days before the filterable particulate matter performance test is initially scheduled to begin. [40 CFR 63.7(b), 40 CFR 63.9640(d), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A)]
6.131.9	Filterable Particulate Matter: The Permittee shall submit the performance test results: Due 60 days after the completion of each performance test required by 40 CFR pt. 63, subp. RRRRR, following the procedures specified in 40 CFR 63.9641(f)(1) through (3). [40 CFR 63.9641(f), Minn. R. 7011.8030]
6.131.10	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.131.11	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 340	**Bentonite Unloading**
6.132.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.132.2	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit.

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	The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.132.3	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.132.4	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]

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6.132.5	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
EQUI 341	**Bentonite Receiving Bin 1**
6.133.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.133.2	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.133.3	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions.

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	The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.133.4	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.133.5	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.675(b)(2) and (c)(2). [40 CFR 60.672(a), 40 CFR 60.675(b)(2), 40 CFR 60.675(c)(2), 40 CFR 60.8(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.133.6	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days

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	after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.676(i), 40 CFR 60.7(a)(3), Minn. R. 7011.3350, Minn. R. 7019.0100, subp. 1]
6.133.7	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 342	**Bentonite Receiving Bin 2**
6.134.1	Filterable Particulate Matter: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.134.2	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.134.3	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions.

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	The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.134.4	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.134.5	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.675(b)(2) and (c)(2). [40 CFR 60.672(a), 40 CFR 60.675(b)(2), 40 CFR 60.675(c)(2), 40 CFR 60.8(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]

Requirement number	Requirement and citation
6.134.6	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.676(i), 40 CFR 60.7(a)(3), Minn. R. 7011.3350, Minn. R. 7019.0100, subp. 1]
6.134.7	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 343	**Secondary Crusher Lines Bin Feed**
6.135.1	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, Minn. R. 7017.2020, subp. 1]
6.135.2	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.135.3	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.135.4	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 347	**Pellet Plant Fines Bin Discharge**
6.136.1	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2020, subp. 1, Minn. R. 7017.2025, subp. 2(A)]
6.136.2	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.136.3	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.136.4	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 376	**Pellet Loadout**
6.137.1	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date and at a minimum every 24 months thereafter to measure emissions.

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	The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 24 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 24 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 5 or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.137.2	Filterable Particulate Matter: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure emissions. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 17, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(1). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8(a), Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.137.3	Filterable Particulate Matter: The Permittee must conduct a performance test due 180 calendar days after Initial Startup Date and at a minimum every 24 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 24 months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 24 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 5, 5D, 17, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. For 40 CFR pt. 63, subp. RRRRR, each Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of 40 CFR 63.9621. The Permittee must use the results of this performance test to determine the flow-weighted mean concentration of filterable particulate matter emissions following the procedures in 40 CFR 63.9621(b)(3). [40 CFR 63.7, 40 CFR 63.9621(a), 40 CFR 63.9621(b)(1) & (2), 40 CFR 63.9630(c), 40 CFR 63.9634(b)(2), Minn. R. 7011.8030, Minn. R. 7017.2015, subp. 3(A), Minn. R. 7017.2020, subp. 1]
6.137.4	PM < 10 micron: The Permittee shall conduct an initial performance test due 180 calendar days after

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	Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.137.5	PM < 2.5 micron: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure emissions. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter. If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 201A and 202, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000, Title I Condition: 40 CFR 52.21(k)(modeling) & Minn. R. 7007.3000]
6.137.6	Opacity: The Permittee shall conduct an initial performance test due 180 calendar days after Initial Startup Date and at a minimum every 60 months thereafter to measure opacity. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall be completed no less than every 60-months by the due date (month and day) based on the initial test date or more frequently as stated in the NOC/NOV letter.

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	If the Commissioner sets a test frequency at less than every 60 months, the Permittee must apply for an administrative amendment to incorporate the prescribed test frequency into the permit. A major amendment is required to reduce the test frequency once set in the permit. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to a performance test due date will not reset the due date for future testing. Testing conducted more than 60 days prior to the specified due date satisfies this test due date requirement but will reset future performance test due dates based on the most recent performance test date. [Stage 1]. [Minn. R. 7017.2020, subp. 1, Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.137.7	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.386(b)(2). [40 CFR 60.385(a), 40 CFR 60.386(a) & (b), 40 CFR 60.8, Minn. R. 7011.2700, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.137.8	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.7(a)(3), Minn. R. 7019.0100, subp. 1]
6.137.9	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 377	**Pellet Loadout Baghouse Leak Detector**
6.138.1	The Permittee shall submit a monitoring plan : Due before Initial Startup Date of EQUI 376 that addresses the items identified in 40 CFR 63.9632(a)(5)(i) through (v). The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. EPA guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) (incorporated by reference - see 40 CFR 63.14). The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in 40 CFR 63.9632(a)(5)(i) through (v). [40 CFR 63.9632(a)(5), Minn. R. 7011.8030]
EQUI 383	**Alternative Limestone or Dolomite Deliveries**
6.139.1	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.675(b)(2) and (c)(2). [40 CFR 60.672(a), 40 CFR 60.675(b)(2), 40 CFR 60.675(c)(2), 40 CFR 60.8(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.139.2	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.676(i), 40 CFR 60.7(a)(3), Minn. R. 7011.3350, Minn. R. 7019.0100, subp. 1]
6.139.3	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]

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EQUI 384	**Alternative Additive Deliveries**
6.140.1	Opacity: The Permittee shall conduct a performance test due 180 calendar days after Initial Startup Date to measure opacity. The performance test shall be conducted at worst-case conditions as defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Method 9, or other method approved by MPCA in the performance test plan approval. The Permittee shall conduct the performance test according to the requirements of 40 CFR 60.675(b)(2) and (c)(2). [40 CFR 60.672(a), 40 CFR 60.675(b)(2), 40 CFR 60.675(c)(2), 40 CFR 60.8(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350, Minn. R. 7017.2015, subp. 2(A), Minn. R. 7017.2020, subp. 1]
6.140.2	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. The notification shall be submitted electronically on Form CS-02. [40 CFR 60.676(i), 40 CFR 60.7(a)(3), Minn. R. 7011.3350, Minn. R. 7019.0100, subp. 1]
6.140.3	The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]
EQUI 385	**Mixing Conveyor Baghouse Bag Leak Detector**
6.141.1	The Permittee must submit a site-specific monitoring plan: Due before Initial Startup Date of EQUI 112. The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. Each monitoring plan must describe the items in 40 CFR 60.674(d)(2)(i) through (vi). [40 CFR 60.674(d)(2), Minn. R. 7011.2305]
EQUI 388	**Organic Binder and Sodium Carbonate Bins Baghouse Bag Leak Detector**
6.142.1	The Permittee must submit a site-specific monitoring plan: Due before Initial Startup Date of EQUI 214. The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. Each monitoring plan must describe the items in 40 CFR 60.674(d)(2)(i) through (vi). [40 CFR 60.674(d)(2), Minn. R. 7011.2305]
EQUI 391	**Rotary Rail Car Dumper Baghouse Bag Leak Detector**
6.143.1	The Permittee must submit a site-specific monitoring plan: Due before Initial Startup Date of EQUI 293. The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. Each monitoring plan must describe the items in 40 CFR 60.674(d)(2)(i) through (vi). [40 CFR 60.674(d)(2), Minn. R. 7011.2305]
EQUI 392	**2100 Tonne Stone Bin Baghouse Bag Leak Detector**
6.144.1	The Permittee must submit a site-specific monitoring plan: Due before Initial Startup Date of EQUI 294. The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. Each monitoring plan must describe the items in 40 CFR 60.674(d)(2)(i) through (vi). [40 CFR 60.674(d)(2), Minn. R. 7011.2305]
EQUI 393	**Train Unloading Conveyor Baghouse Bag Leak Detector**
6.145.1	The Permittee must submit a site-specific monitoring plan: Due before Initial Startup Date of EQUI 297. The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. Each monitoring plan must describe the items in 40 CFR 60.674(d)(2)(i) through (vi). [40 CFR 60.674(d)(2), Minn. R. 7011.2305]
EQUI 394	**Overland Conveyor Baghouse Bag Leak Detector**
6.146.1	The Permittee must submit a site-specific monitoring plan: Due before Initial Startup Date of EQUI 298. The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. Each monitoring plan must describe the items in 40 CFR 60.674(d)(2)(i) through (vi). [40 CFR 60.674(d)(2), Minn. R. 7011.2305]
EQUI 395	**Limestone and Dolomite Grinding Mill Baghouse Bag Leak Detector**
6.147.1	The Permittee must submit a site-specific monitoring plan: Due before Initial Startup Date of EQUI 299. The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. Each monitoring plan must describe the items in 40 CFR 60.674(d)(2)(i)

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	through (vi). [40 CFR 60.674(d)(2), Minn. R. 7011.2305]
EQUI 407	**Indurating Furnace Hood Exhaust Stack Mercury CEMS**
6.148.1	Installation Notification: due 60 days before installing the continuous emissions monitoring system. The notification shall include plans and drawings of the system. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 16(L)]
6.148.2	The Permittee shall submit start-up notification: Due 10 working days after Startup of Monitor Date. The notification shall be submitted electronically on Form CS-02. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 16(L)]
6.148.3	Certification Test Plan due 30 days before Certification Test. Certification Test Pretest Meeting due seven days before Certification Test. Certification Test Report due 45 days after Certification Test. Notify the commissioner prior to making any planned change or if unforeseen, within two working days, when a monitor must be recertified as outlined in Minn. R. 7017.1050, subp. 2. Test plans and reports must be submitted in a format specified by the commissioner. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D)]
6.148.4	CEMS Certification/Recertification Test: due 90 days after the first excess emissions report required for the CEMS or any change which invalidates the monitor's certification status as outlined in Minn. R. 7017.1050, subp. 2. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D)]
6.148.5	The Permittee shall conduct CEMS cylinder gas audit (CGA): Due by the end of every second QA operating quarter (calendar quarter in which there are at least 168 unit operating hours) except that a CGA is not required during any quarter in which a RATA is performed. The initial CGA must be performed within 180 days following certification of the CEMS. The CGAs shall be conducted according to the procedures outlined in Minn. R. 7017.1170, subp 4a(A). If the monitored emission unit is not in operation on the CGA due date, the owner or operator has a grace period of 168 operating hours to perform the CGA. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D)]
6.148.6	Cylinder Gas Audit (CGA) Results Summary: due 30 days after end of each calendar quarter in which a CGA was conducted. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 16(L)]
6.148.7	Relative Accuracy Test Audit (RATA) Notification: due 30 days before CEMS Relative Accuracy Test

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	Audit (RATA). This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 16(L)]
6.148.8	The Permittee shall conduct a relative accuracy test audit: Due by the end of every fourth QA operating quarter (calendar quarter in which there are at least 168 unit operating hours). RATAs shall be conducted and frequency may be reduced according to the procedures outlined in Minn. R. 7017.1170, subp. 5a. If the monitored emission unit is not in operation on the RATA due date, the owner or operator has a grace period of 720 operating hours to perform the RATA. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D)]
6.148.9	Relative Accuracy Test Audit (RATA) Results Summary: due 30 days after end of each calendar quarter in which a RATA was conducted. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 16(L)]
EQUI 408	**Indurating Furnace Waste Gas Stack Mercury CEMS**
6.149.1	Installation Notification: due 60 days before installing the continuous emissions monitoring system. The notification shall include plans and drawings of the system. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D)]
6.149.2	The Permittee shall submit start-up notification: Due 10 working days after Startup of Monitor Date. The notification shall be submitted electronically on Form CS-02. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 16(L)]
6.149.3	Certification Test Plan due 30 days before Certification Test. Certification Test Pretest Meeting due seven days before Certification Test. Certification Test Report due 45 days after Certification Test. Notify the commissioner prior to making any planned change or if unforeseen, within two working days, when a monitor must be recertified as outlined in Minn. R. 7017.1050, subp. 2. Test plans and reports must be submitted in a format specified by the commissioner. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D)]
6.149.4	CEMS Certification/Recertification Test: due 90 days after the first excess emissions report required for the CEMS or any change which invalidates the monitor's certification status as outlined in Minn. R. 7017.1050, subp. 2. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R.

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	7007.0800, subp. 4(D)]
6.149.5	The Permittee shall conduct CEMS cylinder gas audit (CGA): Due by the end of every second QA operating quarter (calendar quarter in which there are at least 168 unit operating hours) except that a CGA is not required during any quarter in which a RATA is performed. The initial CGA must be performed within 180 days following certification of the CEMS. The CGAs shall be conducted according to the procedures outlined in Minn. R. 7017.1170, subp 4a(A). If the monitored emission unit is not in operation on the CGA due date, the owner or operator has a grace period of 168 operating hours to perform the CGA. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D)]
6.149.6	Cylinder Gas Audit (CGA) Results Summary: due 30 days after end of each calendar quarter in which a CGA was conducted. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 16(L)]
6.149.7	Relative Accuracy Test Audit (RATA) Notification: due 30 days before CEMS Relative Accuracy Test Audit (RATA). This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 16(L)]
6.149.8	The Permittee shall conduct a relative accuracy test audit: Due by the end of every fourth QA operating quarter (calendar quarter in which there are at least 168 unit operating hours). RATAs shall be conducted and frequency may be reduced according to the procedures outlined in Minn. R. 7017.1170, subp. 5a. If the monitored emission unit is not in operation on the RATA due date, the owner or operator has a grace period of 720 operating hours to perform the RATA. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 4(D)]
6.149.9	Relative Accuracy Test Audit (RATA) Results Summary: due 30 days after end of each calendar quarter in which a RATA was conducted. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 16(L)]
EQUI 410	**Indurating Furnace Waste Gas Stack Air Flow Rate Monitor**
6.150.1	Installation Notification: due 60 days before installing the continuous emissions monitoring system. The notification shall include plans and drawings of the system. [Minn. R. 7017.1040, subp. 1]
6.150.2	The Permittee shall submit start-up notification: Due 10 working days after Startup of Monitor Date. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 2]
6.150.3	Certification Test Plan due 30 days before Certification Test. Certification Test Pretest Meeting due seven days before Certification Test. Certification Test Report due 45 days after Certification Test. Notify the commissioner prior to making any planned change or if unforeseen, within two working days, when a monitor must be recertified as outlined in Minn. R. 7017.1050, subp. 2.

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	Test plans and reports must be submitted in a format specified by the commissioner. [Minn. R. 7017.1060, subp. 1-3, Minn. R. 7017.1080]
6.150.4	CEMS Certification/Recertification Test: due 90 days after the first excess emissions report required for the CEMS or any change which invalidates the monitor's certification status as outlined in Minn. R. 7017.1050, subp. 2. [Minn. R. 7017.1050, subp. 1]
EQUI 411	**Indurating Furnace Hood Exhaust Stack Air Flow Rate Monitor**
6.151.1	Installation Notification: due 60 days before installing the continuous emissions monitoring system. The notification shall include plans and drawings of the system. [Minn. R. 7017.1040, subp. 1]
6.151.2	The Permittee shall submit start-up notification: Due 10 working days after Startup of Monitor Date. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 2]
6.151.3	Certification Test Plan due 30 days before Certification Test. Certification Test Pretest Meeting due seven days before Certification Test. Certification Test Report due 45 days after Certification Test. Notify the commissioner prior to making any planned change or if unforeseen, within two working days, when a monitor must be recertified as outlined in Minn. R. 7017.1050, subp. 2. Test plans and reports must be submitted in a format specified by the commissioner. [Minn. R. 7017.1060, subp. 1-3, Minn. R. 7017.1080]
6.151.4	CEMS Certification/Recertification Test: due 90 days after the first excess emissions report required for the CEMS or any change which invalidates the monitor's certification status as outlined in Minn. R. 7017.1050, subp. 2. [Minn. R. 7017.1050, subp. 1]
FUGI 13	**Out-of-pit Haul Road Emissions**
6.152.1	The Permittee must submit an annual report by the 31st of January after the initial startup date of mining operations. The report shall document the percentage of days watering was required that the Permittee did not meet the daily minimum watering intensity for the semi-annual reporting periods. The report shall be submitted with the annual Compliance Certification required by this permit. [Minn. R. 7007.0800, subp. 16(L)]
FUGI 16	**Crude Ore Loadout**
6.153.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. Submit the name and number of the Subject Item and the date of startup. Startup is as defined in Minn. R. 7005.0100, subp. 42a. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
FUGI 20	**Service Road Emissions**
6.154.1	The Permittee must submit an annual report by the 31st of January after the initial startup date of mining operations. The report shall document the percentage of days watering was required that the Permittee did not meet the daily minimum watering intensity for the semi-annual reporting periods. The report shall be submitted with the annual Compliance Certification required by this permit. [Minn. R. 7007.0800, subps. 16(L)]
FUGI 24	**Grading at Tailings Basin**
6.155.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. Submit the name and number of the Subject Item and the date of startup. Startup is as defined in Minn. R. 7005.0100, subp. 42a. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
FUGI 25	**Dozer Activity at Tailings Basin**
6.156.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days

Requirement number	Requirement and citation
	after Initial Startup Date. Submit the name and number of the Subject Item and the date of startup. Startup is as defined in Minn. R. 7005.0100, subp. 42a. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
FUGI 26	**Tailings Basin Wind Erosion**
6.157.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. Submit the name and number of the Subject Item and the date of startup. Startup is as defined in Minn. R. 7005.0100, subp. 42a. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
FUGI 27	**Product Stockpile Wind Erosion**
6.158.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. Submit the name and number of the Subject Item and the date of startup. Startup is as defined in Minn. R. 7005.0100, subp. 42a. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
FUGI 35	**Drop onto Cobber Rejects Pile**
6.159.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. Submit the name and number of the Subject Item and the date of startup. Startup is as defined in Minn. R. 7005.0100, subp. 42a. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
FUGI 36	**Cobber Rejects Pile Wind Erosion**
6.160.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. Submit the name and number of the Subject Item and the date of startup. Startup is as defined in Minn. R. 7005.0100, subp. 42a. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
FUGI 37	**Cobber Rejects Pile Loadout**
6.161.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. Submit the name and number of the Subject Item and the date of startup. Startup is as defined in Minn. R. 7005.0100, subp. 42a. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
FUGI 38	**Cobber Rejects Unloading (Truck)**
6.162.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. Submit the name and number of the Subject Item and the date of startup. Startup is as defined in Minn. R. 7005.0100, subp. 42a. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
FUGI 39	**Cobber Rejects Stockpile Wind Erosion**
6.163.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. Submit the name and number of the Subject Item and the date of startup. Startup is as defined in Minn. R. 7005.0100, subp. 42a. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
FUGI 40	**120K ton Concentrate Stockpile Loading**
6.164.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. Submit the name and number of the Subject Item and the date of startup.

Requirement number	Requirement and citation
	Startup is as defined in Minn. R. 7005.0100, subp. 42a. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
FUGI 41	**120K ton Concentrate Stockpile Wind Erosion**
6.165.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. Submit the name and number of the Subject Item and the date of startup. Startup is as defined in Minn. R. 7005.0100, subp. 42a. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
FUGI 42	**120K ton Concentrate Stockpile Loadout**
6.166.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. Submit the name and number of the Subject Item and the date of startup. Startup is as defined in Minn. R. 7005.0100, subp. 42a. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
FUGI 84	**Mobile Sources**
6.167.1	The Permittee shall submit an annual report: Due annually, by the 31st of January after the Initial Startup Date of mining operations. The report shall document the diesel fuel 12-month rolling sum calculations for the previous calendar year. The report shall be submitted with the annual Compliance Certification required by this permit. As part of the Annual Report, the Permittee shall verify and certify that none of the daily PM10, NOx, or SO2 emission limits were exceeded during the previous calendar year. [Minn. R. 7007.0800, subp. 16(L)]
FUGI 85	**Small Limestone and Dolomite Stockpile Wind Erosion**
6.168.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. Submit the name and number of the Subject Item and the date of startup. Startup is as defined in Minn. R. 7005.0100, subp. 42a. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
FUGI 86	**Large Limestone and Dolomite Stockpile Wind Erosion**
6.169.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. Submit the name and number of the Subject Item and the date of startup. Startup is as defined in Minn. R. 7005.0100, subp. 42a. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
FUGI 87	**Ore Stockpile Wind Erosion**
6.170.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. Submit the name and number of the Subject Item and the date of startup. Startup is as defined in Minn. R. 7005.0100, subp. 42a. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
FUGI 88	**Ore Pile Loading**
6.171.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. Submit the name and number of the Subject Item and the date of startup. Startup is as defined in Minn. R. 7005.0100, subp. 42a. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
FUGI 90	**Product Stockpile Loadout**
6.172.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. Submit the name and number of the Subject Item and the date of startup.

Requirement number	Requirement and citation
	Startup is as defined in Minn. R. 7005.0100, subp. 42a. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
FUGI 94	**Small Limestone and Dolomite Stockpile Loading**
6.173.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. Submit the name and number of the Subject Item and the date of startup. Startup is as defined in Minn. R. 7005.0100, subp. 42a. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
FUGI 95	**Small Limestone and Dolomite Stockpile Loadout**
6.174.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. Submit the name and number of the Subject Item and the date of startup. Startup is as defined in Minn. R. 7005.0100, subp. 42a. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
FUGI 96	**Large Limestone and Dolomite Stockpile Loading**
6.175.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. Submit the name and number of the Subject Item and the date of startup. Startup is as defined in Minn. R. 7005.0100, subp. 42a. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
FUGI 97	**Large Limestone and Dolomite Stockpile Loadout**
6.176.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. Submit the name and number of the Subject Item and the date of startup. Startup is as defined in Minn. R. 7005.0100, subp. 42a. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
FUGI 98	**Emergency Product Conveyor from Pellet Discharge**
6.177.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. Submit the name and number of the Subject Item and the date of startup. Startup is as defined in Minn. R. 7005.0100, subp. 42a. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
FUGI 99	**Product Stockpile Conveyor**
6.178.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. Submit the name and number of the Subject Item and the date of startup. Startup is as defined in Minn. R. 7005.0100, subp. 42a. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
FUGI 100	**In-pit Haul Roads Emissions**
6.179.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. Submit the name and number of the Subject Item and the date of startup. Startup is as defined in Minn. R. 7005.0100, subp. 42a. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
FUGI 101	**Blasting**
6.180.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. Submit the name and number of the Subject Item and the date of startup. Startup is as defined in Minn. R. 7005.0100, subp. 42a.

Requirement number	Requirement and citation
	The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
FUGI 184	**Ore Stockpile Loadout**
6.181.1	The Permittee shall submit a notification of the actual date of initial startup: Due 15 calendar days after Initial Startup Date. Submit the name and number of the Subject Item and the date of startup. Startup is as defined in Minn. R. 7005.0100, subp. 42a. The notification shall be submitted electronically on Form CS-02. [Minn. R. 7007.0800, subp. 16(L)]
STRU 202	**Pellet Loadout Building**
6.182.1	The Permittee shall submit a report: Due 60 calendar days after the initial startup date of EQUI 376 that certifies that the enclosure conforms to the requirements identified in the Enclosure Certification and Evaluation requirement in this permit. The Permittee shall submit the results of the evaluation and certification on form CR-02, along with any other information required by the forms for MPCA review. [Minn. R. 7007.0800, subp. 16(L), Minn. R. 7007.0800, subp. 2(A) & (B)]
STRU 206	**Additive Grinding Stone Storage Bin**
6.183.1	The Permittee shall submit a report: Due 60 calendar days after the initial startup date of EQUI 294 that certifies that the enclosure conforms to the requirements identified in the Enclosure Certification and Evaluation requirement in this permit. The Permittee shall submit the results of the evaluation and certification on form CR-02, along with any other information required by the forms for MPCA review. [Minn. R. 7007.0800, subp. 16(L), Minn. R. 7007.0800, subp. 2(A) & (B)]
STRU 208	**Overland Conveyor Building**
6.184.1	The Permittee shall submit a report: Due 60 calendar days after the initial startup date of EQUI 298 that certifies that the enclosure conforms to the requirements identified in the Enclosure Certification and Evaluation requirement in this permit. The Permittee shall submit the results of the evaluation and certification on form CR-02, along with any other information required by the forms for MPCA review. [Minn. R. 7007.0800, subp. 16(L), Minn. R. 7007.0800, subp. 2(A) & (B)]
STRU 209	**Train Unloading Conveyor Building**
6.185.1	The Permittee shall submit a report: Due 60 calendar days after the initial startup date of EQUI 297 that certifies that the enclosure conforms to the requirements identified in the Enclosure Certification and Evaluation requirement in this permit. The Permittee shall submit the results of the evaluation and certification on form CR-02, along with any other information required by the forms for MPCA review. [Minn. R. 7007.0800, subp. 16(L), Minn. R. 7007.0800, subp. 2(A) & (B)]
TREA 1	**Grizzly Scalping Screen Baghouse**
6.186.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 132. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 4	**Coarse Ore Storage Conveyor Baghouse**
6.187.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 140 and EQUI 263. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 5	**Fine Ore Storage Conveyor Baghouse**
6.188.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 141 and EQUI 264. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 6	**Fine Ore Mill Bay Tunnel 1A Baghouse**

Requirement number	Requirement and citation
6.189.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 111. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 10	**Bentonite Receiving Bin 2 Bin Vent**
6.190.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 342. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions. [40 CFR 64.3, Minn. R. 7017.0200]
TREA 11	**Hearth Layer Baghouse**
6.191.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 114, EQUI 124, and EQUI 135. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 13	**Indurating Furnace Hood Exhaust Baghouse**
6.192.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 257. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 14	**Indurating Furnace Waste Gas Multiclone 1**
6.193.1	The Permittee shall submit an operation and maintenance plan : Due before Initial Startup Date of EQUI 258. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions. Each operation and maintenance plan must address the following elements: - preventative maintenance for each control device, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance; and - corrective action procedures for continuous parameter monitoring systems. In the event the Permittee exceed an established operating limit, the Permittee must initiate corrective action to determine the cause of the operating limit exceedance and complete the corrective action within 10 calendar days. The corrective action procedures the Permittee takes must be consistent with the installation, operation, and maintenance procedures listed in the site-specific monitoring plan in accordance with 40 CFR 63.9632(b). [40 CFR 63.9600(b), 40 CFR 63.9625(a), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
6.193.2	The Permittee must submit a site-specific monitoring plan due: 60 days after the completion of the initial performance test required by 40 CFR pt. 63, subp. RRRRR that includes the information in 40 CFR 63.9631(i)(1) through (4). [40 CFR 63.9590(b)(8), 40 CFR 63.9622(e), 40 CFR 63.9623(b)(5), 40 CFR 63.9631(i), 40 CFR 63.9634(k), Minn. R. 7011.8030]
TREA 15	**Indurating Furnace Waste Gas Baghouse 1**
6.194.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 258. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 16	**Pellet Discharge Baghouse**
6.195.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 127 and EQUI 135. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 17	**Hearth Layer Separation Baghouse**
6.196.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of

Requirement number	Requirement and citation
	EQUI 135 and EQUI 259. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 18	**Product Junction House 1 Baghouse**
6.197.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 330. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 19	**Product Junction House 4 Baghouse**
6.198.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 331. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 42	**Secondary Crusher Line 1 Baghouse**
6.199.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 253 and EQUI 343. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 43	**Cobber Rejects Transfer Tower Baghouse**
6.200.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 252. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 44	**Secondary Crusher Line 2 Baghouse**
6.201.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 254 and EQUI 343. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 45	**Secondary Crusher Line 3 Baghouse**
6.202.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 255 and EQUI 343. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 46	**Secondary Crusher Line 4 Baghouse**
6.203.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 256 and EQUI 343. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 47	**Grizzly Transfer Tower Baghouse**
6.204.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 251. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 49	**Indurating Furnace Waste Gas Gas Suspension Absorber 1**
6.205.1	The Permittee shall submit a GSA Design Specifications Report: Due 90 calendar days before Initial Startup Date of EQUI 258. The report shall include design specifications from the pelletizer furnace and GSA vendors, which indicate that the system has been designed to achieve a SO2 emission rate of 5.0 ppm (wet basis) on a 1-hour average. The specifications shall identify the parameters and conditions

Requirement number	Requirement and citation
	used for system design such as: - design conditions and parameters of the scrubber, including scrubber chemistry, range of chemical and physical characteristics allowed in the reagent selected; - operating conditions (e.g. furnace production level, flue gas flow rate, inlet SO2 levels, temperature); and - selection of reagent (e.g., lime), reagent purity, calcium content, physical characteristics (e.g. pebble size, available surface area). [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.205.2	The Permittee shall submit a GSA Evaluation Plan: Due 60 calendar days before Initial Startup Date of EQUI 258. The plan shall include plans for a GSA Evaluation Study which will address issues related to optimizing SO2 control. If the MPCA does not provide written approval or written comments to the Permittee on the proposed GSA Evaluation Plan within 30 days of receipt of the plan, the Permittee may implement the plan as proposed. The Permittee may amend the GSA Evaluation Plan 30 days after submitting a notification of the proposed changes to the MPCA. The notification will include a list of the proposed changes, the rationale for the proposed changes, and any change to monitoring or recordkeeping that will occur. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.205.3	The Permittee shall submit a GSA Evaluation Report: Due 270 calendar days after Initial Startup Date of EQUI 258. The report shall include results from the items in the GSA Evaluation Study as identified in the approved GSA Evaluation Plan. The report shall include: - the impact of ore sulfur content and fuel sulfur content on the level of SO2 emissions control; - the GSA response time to changes in SO2 loading and the impact the GSA response time has on meeting a 1-hour average SO2 limit; - the impact of lime addition rates on SO2 control and the feasibility of meeting the proposed SO2 limits; - the impact GSA operating parameters (e.g. water and steam injection rates) have on SO2 control and the feasibility of meeting the proposed SO2 limits; - the records that will be maintained so that the MPCA can determine whether the measures are being followed and whether the plant's operating parameters are consistent with the control system design; and - the recommended operation for best GSA performance. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.205.4	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 258. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (3). [40 CFR 63.9600(b), 40 CFR 63.9625(a), Minn. R. 7011.8030]
TREA 51	**Mercury Control Carbon Bin Baghouse**
6.206.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 122. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions. [40 CFR 64.3, Minn. R. 7017.0200]
TREA 68	**Coarse Ore Mill Bay Tunnel 1 Baghouse**
6.207.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 110. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 120	**Ore Dumping Baghouse**
6.208.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 262. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]

Requirement number	Requirement and citation
TREA 122	**Rotary Rail Car Dumper Baghouse**
6.209.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 293. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions. [40 CFR 64.3, Minn. R. 7017.0200]
TREA 124	**5500 Tonne Limestone Storage Bin Bin Vent**
6.210.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 295. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions. [40 CFR 64.3, Minn. R. 7017.0200]
TREA 125	**5500 Tonne Dolomite Storage Bin Bin Vent**
6.211.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 296. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions. [40 CFR 64.3, Minn. R. 7017.0200]
TREA 128	**Limestone and Dolomite Grinding Mill Baghouse**
6.212.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 299. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions. [40 CFR 64.3, Minn. R. 7017.0200]
TREA 129	**Fine Ore Mill Bay Tunnel1B Baghouse**
6.213.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 335. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 130	**Fine Ore Mill Bay Tunnel 2A Baghouse**
6.214.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 336. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 131	**Fine Ore Mill Bay Tunnel 2B Baghouse**
6.215.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 337. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 132	**Fine Ore Mill Bay Tunnel 3A Baghouse**
6.216.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 338. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 133	**Fine Ore Mill Bay Tunnel 3B Baghouse**
6.217.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 339. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 134	**Coarse Ore Mill Bay Tunnel 2 Baghouse**
6.218.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 333. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 135	**Coarse Ore Mill Bay Tunnel 3 Baghouse**

Requirement number	Requirement and citation
6.219.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 334. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 138	**Bentonite Receiving Bin 1 Bin Vent**
6.220.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 341. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions. [40 CFR 64.3, Minn. R. 7017.0200]
TREA 139	**Mixing Conveyor Baghouse**
6.221.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 112 and EQUI 113. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions. [40 CFR 64.3, Minn. R. 7017.0200]
TREA 140	**Product Junction House 2 Baghouse**
6.222.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 286. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 141	**Product Junction House 3 Baghouse**
6.223.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 287. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 142	**Bentonite Receiving Bin 3 Bin Vent**
6.224.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 288. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions. [40 CFR 64.3, Minn. R. 7017.0200]
TREA 143	**Dolomite Bin Bin Vent**
6.225.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 282. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions. [40 CFR 64.3, Minn. R. 7017.0200]
TREA 148	**Pellet Bunker Tripper Conveyor Baghouse**
6.226.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 300. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 149	**Pellet Bunker Product Conveyor Baghouse**
6.227.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 303. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 150	**Primary Crusher Building Baghouse**
6.228.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 131 and EQUI 289. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 151	**Pneumatic Transport Vent 1 Bin Vent**
6.229.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of

Requirement number	Requirement and citation
	EQUI 290. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions. [40 CFR 64.3, Minn. R. 7017.0200]
TREA 152	**Pneumatic Transport Vent 2 Bin Vent**
6.230.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 291. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions. [40 CFR 64.3, Minn. R. 7017.0200]
TREA 159	**Indurating Furnace Waste Gas Activated Carbon Injection 1**
6.231.1	The Permittee shall submit an operation and maintenance plan: Due 90 calendar days before Initial Startup Date of EQUI 258. The plan shall specify the operating parameters to be monitored to ensure proper operation of the mercury reduction technology. The plan shall also include, at a minimum, technical specifications for any oxidizing and adsorption agents to be used, as allowed by the equipment vendor considering any patented or proprietary information; target injection rates; and routine and long-term maintenance and inspection requirements that are consistent with the manufacturer's specifications. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 16(L)]
6.231.2	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 258. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (3). [40 CFR 63.9600(b), 40 CFR 63.9625(a), Minn. R. 7011.8030]
TREA 170	**Pellet Loadout Baghouse**
6.232.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 376. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]
TREA 173	**Indurating Furnace Waste Gas Multiclone 2**
6.233.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 258. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (3). [40 CFR 63.9600(b), 40 CFR 63.9625(a), Minn. R. 7011.8030]
6.233.2	The Permittee must submit a site-specific monitoring plan due: 60 days after the completion of the initial performance test required by 40 CFR pt. 63, subp. RRRRR that includes the information in 40 CFR 63.9631(i)(1) through (4). [40 CFR 63.9590(b)(8), 40 CFR 63.9622(e), 40 CFR 63.9623(b)(5), 40 CFR 63.9631(i), 40 CFR 63.9634(k), Minn. R. 7011.8030]
TREA 174	**Indurating Furnace Waste Gas Gas Suspension Absorber 2**
6.234.1	The Permittee shall submit a GSA Design Specifications Report: Due 90 calendar days before Initial Startup Date of EQUI 258. The report shall include design specifications from the pelletizer furnace and GSA vendors, which indicate that the system has been designed to achieve a SO2 emission rate of 5.0 ppm (wet basis) on a 1-hour average. The specifications shall identify the parameters and conditions used for system design such as: - design conditions and parameters of the scrubber, including scrubber chemistry, range of chemical and physical characteristics allowed in the reagent selected; - operating conditions (e.g. furnace production level, flue gas flow rate, inlet SO2 levels, temperature); and - selection of reagent (e.g., lime), reagent purity, calcium content, physical characteristics (e.g. pebble size, available surface area). [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.234.2	The Permittee shall submit a GSA Evaluation Plan: Due 60 calendar days before Initial Startup Date of

Requirement number	Requirement and citation
	EQUI 258. The plan shall include plans for a GSA Evaluation Study which will address issues related to optimizing SO2 control. If the MPCA does not provide written approval or written comments to the Permittee on the proposed GSA Evaluation Plan within 30 days of receipt of the plan, the Permittee may implement the plan as proposed. The Permittee may amend the GSA Evaluation Plan 30 days after submitting a notification of the proposed changes to the MPCA. The notification will include a list of the proposed changes, the rationale for the proposed changes, and any change to monitoring or recordkeeping that will occur. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.234.3	The Permittee shall submit a GSA Evaluation Report: Due 270 calendar days after Initial Startup Date of EQUI 258. The report shall include results from the items in the GSA Evaluation Study as identified in the approved GSA Evaluation Plan. The report shall include: - the impact of ore sulfur content and fuel sulfur content on the level of SO2 emissions control; - the GSA response time to changes in SO2 loading and the impact the GSA response time has on meeting a 1-hour average SO2 limit; - the impact of lime addition rates on SO2 control and the feasibility of meeting the proposed SO2 limits; - the impact GSA operating parameters (e.g. water and steam injection rates) have on SO2 control and the feasibility of meeting the proposed SO2 limits; - the records that will be maintained so that the MPCA can determine whether the measures are being followed and whether the plant's operating parameters are consistent with the control system design; and - the recommended operation for best GSA performance. [Stage 1]. [Title I Condition: 40 CFR 52.21(j)(BACT) & Minn. R. 7007.3000]
6.234.4	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 258. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (3). [40 CFR 63.9600(b), 40 CFR 63.9625(a), Minn. R. 7011.8030]
TREA 175	**Indurating Furnace Waste Gas Activated Carbon Injection 2**
6.235.1	The Permittee shall submit an operation and maintenance plan: Due 90 calendar days before Initial Startup Date of EQUI 258. The plan shall specify the operating parameters to be monitored to ensure proper operation of the mercury reduction technology. The plan shall also include, at a minimum, technical specifications for any oxidizing and adsorption agents to be used, as allowed by the equipment vendor considering any patented or proprietary information; target injection rates; and routine and long-term maintenance and inspection requirements that are consistent with the manufacturer's specifications. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and persons under the Clean Air Act. [Minn. R. 7007.0502, subp. 8, Minn. R. 7007.0800, subp. 16(L)]
6.235.2	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 258. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (3). [40 CFR 63.9600(b), 40 CFR 63.9625(a), Minn. R. 7011.8030]
TREA 176	**Indurating Furnace Waste Gas Baghouse 2**
6.236.1	The Permittee shall submit an operation and maintenance plan: Due before Initial Startup Date of EQUI 258. The plan must explain why the chosen practices (i.e., quantified objectives) are effective in performing corrective actions and must address the elements in 40 CFR 63.9600(b)(1) and (2). [40 CFR 63.9600(b), 40 CFR 64.3, Minn. R. 7011.8030, Minn. R. 7017.0200]

7. Appendices

Appendix A. Insignificant Activities and General Applicable Requirements

The table below lists the insignificant activities that are currently at the facility and their associated general applicable requirements.

Table 1. Insignificant activities

Minn. R.	Rule description of the activity	General applicable requirement
Minn. R. 7007.1300, subp. 3(C)(2)	Storage tanks: Nonhazardous air pollutant VOC storage tanks with a combined total tankage capacity of not more than 10,000 gallons of nonhazardous air pollutant VOC and with a vapor pressure of not more than 1.0 psia at 60 °F. *MMCL has one 2,200-gallon hydraulic fluid storage tank.*	Requirement to equip the storage vessel with a permanent submerge fill pipe or comply with the requirements of Minn. R. 7011.1505, subp. 3(C) (Minn. R. 7011.1505, subp. 3(B))
Minn. R. 7007.1300, subp. 3(E)	Brazing, soldering, or welding equipment	PM, variable depending on airflow Opacity ≤ 20% (Minn. R. 7011.0715)
Minn. R. 7007.1300, subp. 3(F)	Individual emission units at a stationary source, each of which have a potential to emit the following pollutants in amounts less than: (1) 4,000 lb/yr of CO; (2) 2,000 lb/yr each of NO_x, SO_2, PM, PM_{10}, VOC (including hazardous air pollutant-containing VOC), and ozone; and (3) 1,000 tpy of CO_2e. *MMCL has one 10,000-gallon gasoline storage tank and one 500-gallon gasoline storage tank.*	Requirement to equip the storage vessel with a permanent submerge fill pipe or comply with the requirements of Minn. R. 7011.1505, subp. 3(C) (Minn. R. 7011.1505, subp. 3(B))
		PM, variable depending on airflow Opacity ≤ 20% (Minn. R. 7011.0715)

Appendix B. Modeling Parameters and Emission Rates

Table 1. 2025 modeling point source parameters

Modeling source ID	Description	Release type	UTM: Zone 15 (NAD83) Easting (m)	UTM: Zone 15 (NAD83) Northing (m)	Base elevation (m)	Height (m)	Exit temperature (K)	Diameter (m)	Exit velocity (m/s)	Flow rate (acfm)
STRU017	Pellet Plant Powder Coating Storage Bin Stack	Vertical	483,324.290	5,247,753.180	469.200	54.999	303.150	0.230	3.716	327
STRU058	Primary Ore Dumping Stack	Vertical	481,220.430	5,244,543.860	457.200	30.000	298.150	1.460	15.230	54,000
STRU059	Grizzly Scalping Screen Stack	Vertical	481,101.580	5,244,714.180	457.420	40.000	298.150	1.006	14.257	24,000
STRU063	Bentonite Unloading Stack	Vertical	483,230.400	5,247,299.470	466.660	18.290	298.150	0.570	15.359	8,300
STRU067	Indurating Furnace Hood Exhaust Stack	Vertical	483,208.880	5,247,445.460	468.800	100.000	318.000	5.030	15.575	655,451
STRU068	Indurating Furnace Waste Gas Stack	Vertical	483,204.000	5,247,447.730	468.800	100.000	318.000	5.440	12.861	633,045
STRU069	Pellet Discharge Stack	Vertical	483,127.600	5,247,660.050	469.200	60.000	298.150	1.660	15.185	69,600
STRU070	Hearth Layer Separation Stack	Vertical	483,277.390	5,247,593.300	469.200	55.016	298.150	1.118	15.000	31,200
STRU083	Secondary Crusher Line 1 Stack	Vertical	480,835.830	5,244,765.920	468.500	34.991	298.150	1.097	13.988	28,000
STRU084	Secondary Crusher Line 2 Stack	Vertical	480,837.180	5,244,773.060	468.500	34.991	298.150	1.097	13.988	28,000
STRU085	Secondary Crusher Line 3 Stack	Vertical	480,838.340	5,244,779.430	468.500	34.991	298.150	1.097	13.988	28,000
STRU086	Secondary Crusher Line 4 Stack	Vertical	480,839.430	5,244,786.490	468.500	34.991	298.150	1.097	13.988	28,000
STRU148	Rotary Rail Car Dumper Stack	Vertical	482,788.200	5,246,760.660	464.150	10.973	298.150	1.340	15.067	45,000
STRU149	2100 Tonne Stone Bin Stack	Vertical	483,058.500	5,247,191.330	467.590	43.510	298.150	0.210	16.768	1,230
STRU150	5500 Tonne Limestone Storage Bin Stack	Vertical	483,092.410	5,247,265.620	469.220	43.617	298.150	0.520	14.452	6,500
STRU151	5500 Tonne Dolomite Storage Bin Stack	Vertical	483,104.870	5,247,256.490	469.040	43.617	298.150	0.520	14.452	6,500
STRU152	Train Unloading Conveyor Stack	Vertical	482,851.020	5,246,791.100	464.350	12.649	298.150	0.180	16.329	880
STRU153	36" Overland Conveyor Stack	Vertical	483,119.030	5,247,145.700	465.310	32.665	298.150	0.180	16.329	880
STRU154	Limestone and Dolomite Grinding Mill Stack	Vertical	483,069.790	5,247,246.160	468.930	36.576	355.370	1.420	13.564	45,491
STRU155	Residual Silo Stack	Vertical	483,224.570	5,247,511.200	469.240	26.30	298.150	0.799	0.832	883
STRU195	Product Junction House 4 Stack	Vertical	483,277.810	5,247,594.260	469.200	55.016	319.261	1.234	15.000	38,000

Modeling source ID	Description	Release type	UTM: Zone 15 (NAD83) Easting (m)	UTM: Zone 15 (NAD83) Northing (m)	Base elevation (m)	Height (m)	Exit temperature (K)	Diameter (m)	Exit velocity (m/s)	Flow rate (acfm)
STRU196	Pellet Bunker Stack	Vertical	483,384.460	5,247,539.310	470.980	45.720	298.150	1.652	16.690	75,800
STRU201	Oxide Product Loadout to Railcars	Vertical	483,605.300	5,247,453.230	470.740	36.580	298.150	1.676	17.551	82,000

Table 2. 2025 modeling point source emission rates

Modeling source ID	Description	PM_{10} (g/s)	$PM_{2.5}$ (g/s)	SO_2 (g/s)	CO (g/s)	NO_x (g/s)	Lead (g/s)
STRU017	Pellet Plant Powder Coating Storage Bin Stack	6.01E-04	6.01E-04	-	-	-	1.38E-09
STRU058	Primary Ore Dumping Stack	1.01E-01	1.01E-01	-	-	-	1.21E-06
STRU059	Grizzly Scalping Screen Stack	4.50E-02	4.50E-02	-	-	-	5.39E-07
STRU063	Bentonite Unloading Stack	1.55E-02	1.55E-02	-	-	-	3.58E-08
STRU067*	Indurating Furnace Hood Exhaust Stack	0.00E+00	0.00E+00	1.08E+01 0.00E+00	8.56E-01	1.71E+01 0.00E+00	2.63E-03
STRU068*	Indurating Furnace Waste Gas Stack	1.15E+01	1.15E+01	0.00E+00 1.08E+01	2.44E+00	0.00E+00 1.71E+01	2.63E-03
STRU069	Pellet Discharge Stack	1.29E-01	1.29E-01	-	-	-	2.58E-07
STRU070	Hearth Layer Separation Stack	5.78E-02	5.78E-02	-	-	-	1.16E-07
STRU083	Secondary Crusher Line 1 Stack	5.24E-02	5.24E-02	-	-	-	6.29E-07
STRU084	Secondary Crusher Line 2 Stack	5.24E-02	5.24E-02	-	-	-	6.29E-07
STRU085	Secondary Crusher Line 3 Stack	5.24E-02	5.24E-02	-	-	-	6.29E-07
STRU086	Secondary Crusher Line 4 Stack	5.24E-02	5.24E-02	-	-	-	6.29E-07
STRU148	Rotary Rail Car Dumper Stack	8.43E-02	8.43E-02	-	-	-	1.94E-07
STRU149	2100 Tonne Stone Bin Stack	2.30E-03	2.30E-03	-	-	-	5.30E-09
STRU150	5500 Tonne Limestone Storage Bin Stack	1.22E-02	1.22E-02	-	-	-	2.80E-08
STRU151	5500 Tonne Dolomite Storage Bin Stack	1.22E-02	1.22E-02	-	-	-	2.80E-08
STRU152	Train Unloading Conveyor Stack	1.65E-03	1.65E-03	-	-	-	3.79E-09
STRU153	36" Overland Conveyor Stack	1.65E-03	1.65E-03	-	-	-	3.79E-09
STRU154	Limestone and Dolomite Grinding Mill Stack	7.94E-02	7.94E-02	1.85E-03	2.59E-01	3.09E-01	1.73E-06
STRU155	Residual Silo Stack	1.65E-03	1.65E-03	-	-	-	3.31E-09

Modeling source ID	Description	PM_{10} (g/s)	$PM_{2.5}$ (g/s)	SO_2 (g/s)	CO (g/s)	NO_x (g/s)	Lead (g/s)
STRU195	Product Junction House 4 Stack	6.65E-02	6.65E-02	-	-	-	1.33E-07
STRU196	Pellet Bunker Stack	1.42E-01	1.42E-01	-	-	-	2.84E-07
STRU201	Oxide Product Loadout to Railcars	1.59E-01	1.59E-01	-	-	-	3.19E-07

*Two scenarios modeled.

Table 3. 2025 modeling volume source parameters

Modeling source ID	Description	UTM: Zone 15 (NAD83) Easting (m)	UTM: Zone 15 (NAD83) Northing (m)	Base elevation (m)	Height (m)	SigmaY (m)	SigmaZ (m)	Length (m)
COBB	Cobber Stockpile	480,636.480	5,244,999.870	469.130	5.000	14.000	4.650	60.200
COBBWE	Cobber Stockpile Wind Erosion	480,636.480	5,244,999.870	469.130	5.000	14.000	4.650	60.200
CONCPILE	Concentrate Stockpile	483,070.730	5,247,239.030	468.930	5.000	19.460	4.650	83.678
CONCWE	Concentrate Stockpile Wind Erosions	483,070.730	5,247,239.030	468.930	5.000	15.200	4.650	65.360
FS071	Limestone and Dolomite Small Stock Pile Overflow/Loadout	482,938.770	5,247,077.220	468.490	4.572	6.380	4.250	27.432
FS072	Limestone and Dolomite Large Stock Pile Overflow/Loadout	482,938.770	5,247,050.470	468.340	4.572	6.380	4.250	27.432
FS074	Grizzly Transfer Tower	480,892.500	5,244,764.680	467.420	5.029	1.878	4.680	8.077
FS075	Coarse Ore Storage Building	480,944.580	5,245,060.740	484.630	14.021	10.491	13.040	45.110
FS076	Concentrator Building	481,069.600	5,245,021.050	466.650	9.601	23.179	8.930	99.670
FS077	Fine Ore Storage Building	480,884.390	5,245,071.320	484.630	14.021	10.491	13.040	45.110
FS079	Cobber Rejects Transfer Tower	480,845.640	5,244,851.030	468.180	4.572	1.914	4.250	8.230
FS080	Dolomite Bin; Bentonite Bin; Storage Bin 1; Storage Bin 2	483,026.110	5,247,418.640	469.200	18.364	4.253	17.080	18.288
FS081	Air Pollution Control Building	483,135.760	5,247,561.260	469.200	24.232	1.418	22.540	6.096
FS082	Bentonite Receiving Bins	483,131.950	5,247,367.050	469.200	28.270	6.167	26.300	26.518
FS083	Product Junction House 1	483,273.410	5,247,570.030	469.200	13.716	1.489	12.760	6.401
FS084	Product Junction House 2	483,326.240	5,247,706.700	469.200	12.725	1.489	11.840	6.401
FS085	Product Junction House 3	483,316.700	5,247,683.450	469.200	11.582	1.489	10.770	6.401
FS087	Induration Building	483,044.640	5,247,462.960	469.200	15.316	7.230	14.250	31.090

Modeling source ID	Description	UTM: Zone 15 (NAD83) Easting (m)	UTM: Zone 15 (NAD83) Northing (m)	Base elevation (m)	Height (m)	SigmaY (m)	SigmaZ (m)	Length (m)
FS092	Pneumatic Transport Vent 1; Pneumatic Transport Vent 2	483,078.080	5,247,249.170	468.940	16.002	5.316	14.890	22.860
FS093	PCB Belt Conveyor	481,224.200	5,244,561.360	457.200	9.906	3.969	9.210	17.069
FUGI085	Small Limestone and Dolomite Stockpile Wind Erosion	482,938.770	5,247,077.220	468.490	4.572	6.380	4.250	27.432
FUGI086	Large Limestone and Dolomite Stockpile Wind Erosion	482,938.770	5,247,050.470	468.340	4.572	6.380	4.250	27.432
HEMA1	Hematite 1 Stockpile	481,079.360	5,244,637.580	460.090	14.520	4.651	6.753	20.000
HEMA1WE	Hematite 1 Stockpile Wind Erosion	481,079.360	5,244,637.580	460.090	14.520	4.651	6.753	20.000
HEMA3	Hematite 3 Stockpile	480,416.240	5,245,174.760	456.520	14.520	4.651	6.753	20.000
HEMA3WE	Hematite 3 Stockpile Wind Erosion	480,416.240	5,245,174.760	456.520	14.520	4.651	6.753	20.000
HEMA4	Hematite 4 Stockpile	481,763.490	5,245,646.840	458.010	14.520	4.651	6.753	20.000
HEMA4WE	Hematite 4 Stockpile Wind Erosion	481,763.490	5,245,646.840	458.010	14.520	4.651	6.753	20.000
HEMA5	Hematite 5 Stockpile	481,968.430	5,246,171.980	448.410	14.520	4.651	6.753	20.000
HEMA5WE	Hematite 5 Stockpile Wind Erosion	481,968.430	5,246,171.980	448.410	14.520	4.651	6.753	20.000
OB1	Overburden 1 Stockpile	479,859.680	5,244,490.080	447.810	14.520	4.651	6.753	20.000
OB1WE	Overburden 1 Stockpile Wind Erosion	480,254.330	5,244,540.730	460.740	14.520	92.977	6.753	399.800
OXIDE	Oxide Product Stockpile	483,214.760	5,247,742.150	469.100	4.724	35.442	1.099	152.400
OXIDEWE	Oxide Product Stockpile Wind Erosion	483,214.760	5,247,742.150	469.100	4.724	35.442	1.099	152.400
PL024–PL045*	Tailings Basin Truck Traffic	Varies	Varies	Varies	2.000	4.700	1.860	0.000
PRA001–PRA045*	Employee Paved Road	Varies	Varies	Varies	2.075	3.544	1.930	0.000
PRB001–PRB004*	Employee Paved Road	Varies	Varies	Varies	2.075	3.544	1.930	0.000
PRC001–PRB032*	Employee Paved Road	Varies	Varies	Varies	2.075	3.544	1.930	0.000
ROCK1	Waste Rock Stockpile 1	482,054.510	5,245,791.540	456.090	14.520	34.884	6.753	150.000
ROCK1WE	Waste Rock Stockpile 1 Wind Erosion	482,054.510	5,245,791.540	456.090	14.520	34.884	6.753	150.000
ROCK2	Waste Rock Stockpile 2	481,669.280	5,244,672.360	456.490	14.520	4.651	6.753	20.000
ROCK2WE	Waste Rock Stockpile 2 Wind Erosion	481,669.280	5,244,672.360	456.490	14.520	4.651	6.753	20.000
SEGA001–SEGA005*	Haul Road - Segment A	Varies	Varies	Varies	6.800	19.803	6.326	42.576

Modeling source ID	Description	UTM: Zone 15 (NAD83) Easting (m)	UTM: Zone 15 (NAD83) Northing (m)	Base elevation (m)	Height (m)	SigmaY (m)	SigmaZ (m)	Length (m)
SEGB001–SEGB006*	Haul Road - Segment B	Varies	Varies	Varies	6.800	19.803	6.326	42.576
SEGC001–SEGC007*	Haul Road - Segment C	Varies	Varies	Varies	6.800	19.803	6.326	42.576
SEGD001–SEGD011*	Haul Road - Segment D	Varies	Varies	Varies	6.800	19.803	6.326	42.576
SEGE001–SEGE021*	Haul Road - Segment E	Varies	Varies	Varies	6.800	19.803	6.326	42.576
SEGF001–SEGF006*	Haul Road - Segment F	Varies	Varies	Varies	6.800	19.803	6.326	42.576
SEGG001–SEGG020*	Haul Road - Segment G	Varies	Varies	Varies	6.800	19.803	6.326	42.576
SEGH001–SEGH013*	Haul Road - Segment H	Varies	Varies	Varies	6.800	19.803	6.326	42.576
SEGI001–SEGI029*	Haul Road - Segment I	Varies	Varies	Varies	6.800	19.803	6.326	42.576
SEGJ001–SEGJ005*	Haul Road - Segment J	Varies	Varies	Varies	6.800	19.803	6.326	42.576
SEGK001–SEGK005*	Haul Road - Segment K	Varies	Varies	Varies	6.800	19.803	6.326	42.576
SEGL001–SEGL007*	Haul Road - Segment L	Varies	Varies	Varies	6.800	19.803	6.326	42.576
SEGM001–SEGM026*	Haul Road - Segment M	Varies	Varies	Varies	6.800	19.803	6.326	42.576
SEGN001–SEGN020*	Haul Road - Segment N	Varies	Varies	Varies	6.800	19.803	6.326	42.576
SEGO001–SEGO018*	Haul Road - Segment O	Varies	Varies	Varies	6.800	19.803	6.326	42.576
SEGP001–SEGP012*	Haul Road - Segment P	Varies	Varies	Varies	6.800	19.803	6.326	42.576
SEGQ001–SEGQ014*	Haul Road - Segment Q	Varies	Varies	Varies	6.800	19.803	6.326	42.576
SEGR001–SEGR022*	Haul Road - Segment R	Varies	Varies	Varies	6.800	19.803	6.326	42.576
SEGS001–SEGS042*	Haul Road - Segment S	Varies	Varies	Varies	6.800	19.803	6.326	42.576
SH000	Area 000 Space Heaters (2)	480,824.980	5,244,783.030	468.500	24.200	5.935	8.414	0.000
SH200	Area 200 Space Heaters (2)	483,117.580	5,247,512.100	469.200	25.000	40.335	22.558	0.000
SRA001–SRA035*	Employee Unpaved Road	Varies	Varies	Varies	2.075	3.544	1.930	0.000
SRB001–SRB108*	Employee Unpaved Road	Varies	Varies	Varies	2.075	3.544	1.930	0.000
SRC001–SRB102*	Employee Unpaved Road	Varies	Varies	Varies	2.075	3.544	1.930	0.000
STRU58FS	Uncaptured Emissions at Primary Ore Crusher Building (EQUI 262)	481,247.750	5,244,543.280	457.200	4.570	3.400	7.660	0.000
SVCONC	Space Heaters (4)	481,019.350	5,245,024.380	466.650	17.550	23.260	16.330	0.000
TB001–TB119*	Tailings Basin Truck Traffic	Varies	Varies	Varies	2.000	4.700	1.860	0.000

* Multiple modeled sources.

Table 4. 2025 modeling volume source emission rates (non-haul roads)

Modeling source ID	Description	PM_{10} (g/s)	$PM_{2.5}$ (g/s)	SO_2 (g/s)	CO (g/s)	NO_x (g/s)	Lead (g/s)
COBB	Cobber Stockpile	4.36E-01	6.60E-02	-	-	-	7.74E-06
COBBWE	Cobber Stockpile Wind Erosion	1.00E+00	1.00E+00	-	-	-	4.81E-08
CONCPILE	Concentrate Stockpile	7.08E-02	1.07E-02	-	-	-	1.65E-06
CONCWE	Concentrate Stockpile Wind Erosions	1.00E+00	1.00E+00	-	-	-	4.06E-07
FS071	Limestone and Dolomite Small Stock Pile Overflow/Loadout	1.70E-02	2.57E-03	-	-	-	8.24E-08
FS072	Limestone and Dolomite Large Stock Pile Overflow/Loadout	1.70E-02	2.57E-03	-	-	-	8.24E-08
FS074	Grizzly Transfer Tower	6.56E-03	6.56E-03	-	-	-	7.87E-08
FS075	Coarse Ore Storage Building	1.20E-02	1.20E-02	-	-	-	1.76E-07
FS076	Concentrator Building	9.69E-02	9.69E-02	-	-	-	1.16E-06
FS077	Fine Ore Storage Building	1.94E-02	1.94E-02	-	-	-	3.52E-07
FS079	Cobber Rejects Transfer Tower	5.62E-03	5.62E-03	-	-	-	4.72E-08
FS080	Dolomite Bin; Bentonite Bin; Storage Bin 1; Storage Bin 2	8.20E-02	8.20E-02	-	-	-	3.34E-07
FS081	Air Pollution Control Building	4.08E-03	4.08E-03	-	-	-	0.00E+00
FS082	Bentonite Receiving Bins	4.63E-02	4.63E-02	-	-	-	1.06E-07
FS083	Product Junction House 1	6.56E-03	6.56E-03	-	-	-	1.31E-08
FS084	Product Junction House 2	6.56E-03	6.56E-03	-	-	-	1.31E-08
FS085	Product Junction House 3	6.56E-03	6.56E-03	-	-	-	1.31E-08
FS087	Induration Building	1.65E-02	1.65E-02	-	-	-	3.30E-08
FS092	Pneumatic Transport Vent 1; Pneumatic Transport Vent 2	4.68E-03	4.68E-03	-	-	-	1.08E-08
FS093	PCB Belt Conveyor	1.12E-02	1.12E-02	-	-	-	1.35E-07
FUGI085	Small Limestone and Dolomite Stockpile Wind Erosion	1.00E+00	1.00E+00	-	-	-	1.11E-10
FUGI086	Large Limestone and Dolomite Stockpile Wind Erosion	1.00E+00	1.00E+00	-	-	-	1.88E-09
HEMA1	Hematite 1 Stockpile	2.70E-02	6.59E-03	-	-	-	9.58E-07
HEMA1WE	Hematite 1 Stockpile Wind Erosion	1.00E+00	1.00E+00	-	-	-	1.27E-06
HEMA3	Hematite 3 Stockpile	3.27E-03	9.29E-04	-	-	-	8.66E-08
HEMA3WE	Hematite 3 Stockpile Wind Erosion	1.00E+00	1.00E+00	-	-	-	1.27E-06
HEMA4	Hematite 4 Stockpile	6.74E-03	1.81E-03	-	-	-	2.02E-07

Modeling source ID	Description	PM_{10} (g/s)	$PM_{2.5}$ (g/s)	SO_2 (g/s)	CO (g/s)	NO_x (g/s)	Lead (g/s)
HEMA4WE	Hematite 4 Stockpile Wind Erosion	1.00E+00	1.00E+00	-	-	-	1.27E-06
HEMA5	Hematite 5 Stockpile	5.96E-03	1.69E-03	-	-	-	1.58E-07
HEMA5WE	Hematite 5 Stockpile Wind Erosion	1.00E+00	1.00E+00	-	-	-	1.27E-06
OB1	Overburden 1 Stockpile	9.53E-02	2.71E-02	-	-	-	2.52E-06
OB1WE	Overburden 1 Stockpile Wind Erosion	1.00E+00	1.00E+00	-	-	-	1.27E-06
OXIDE	Oxide Product Stockpile	5.79E-01	8.77E-02	-	-	-	2.45E-06
OXIDEWE	Oxide Product Stockpile Wind Erosion	1.00E+00	1.00E+00	-	-	-	9.44E-10
PL024–PL045*	Tailings Basin Truck Traffic	2.81E-04	2.81E-05	-	-	-	1.61E-08
PRA001–PRA045*	Employee Paved Road	8.20E-04	2.01E-04	-	-	-	4.51E-08
PRB001–PRB004*	Employee Paved Road	7.78E-05	1.91E-05	-	-	-	4.28E-09
PRC001–PRB032*	Employee Paved Road	1.44E-04	3.54E-05	-	-	-	7.92E-09
ROCK1	Waste Rock Stockpile 1	1.38E-01	3.40E-02	-	-	-	1.61E-06
ROCK1WE	Waste Rock Stockpile 1 Wind Erosion	1.00E+00	1.00E+00	-	-	-	1.27E-06
ROCK2	Waste Rock Stockpile 2	1.15E-02	3.25E-03	-	-	-	3.04E-07
ROCK2WE	Waste Rock Stockpile 2 Wind Erosion	1.00E+00	1.00E+00	-	-	-	1.27E-06
SH000	Area 000 Space Heaters (2)	1.88E-03	1.88E-03	1.48E-04	2.08E-02	2.47E-02	1.24E-07
SH200	Area 200 Space Heaters (2)	1.88E-03	1.88E-03	1.48E-04	2.08E-02	2.47E-02	1.24E-07
SRA001–SRA035*	Employee Unpaved Road	8.68E-04	8.68E-05	-	-	-	4.97E-08
SRB001–SRB108*	Employee Unpaved Road	2.29E-04	2.29E-05	-	-	-	1.31E-08
SRC001–SRB102*	Employee Unpaved Road	8.99E-04	8.99E-05	-	-	-	5.15E-08
STRU58FS	Uncaptured Emissions at Primary Ore Crusher Building (EQUI 262)	1.11E-02	1.11E-02	-	-	-	1.33E-07
SVCONC	Space Heaters (4)	3.76E-03	3.76E-03	2.96E-04	4.15E-02	4.94E-02	2.47E-07
TB001–TB119*	Tailings Basin Truck Traffic	2.81E-04	2.81E-05	-	-	-	1.61E-08

*Multiple modeled sources.

Table 5. 2025 modeling volume source emission rates (haul roads)

Modeling source ID	Description	Year 1			Year 2			Year 7		
		PM_{10} (g/s)	$PM_{2.5}$ (g/s)	Lead (g/s)	PM_{10} (g/s)	$PM_{2.5}$ (g/s)	Lead (g/s)	PM_{10} (g/s)	$PM_{2.5}$ (g/s)	Lead (g/s)
SEGA001–SEGA005*	Haul Road - Segment A	2.74E-03	3.35E-04	1.57E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SEGB001–SEGB006*	Haul Road - Segment B	2.74E-03	3.35E-04	1.57E-06	0.00E+00	0.00E+00	0.00E+00	5.55E-03	5.55E-04	6.90E-06
SEGC001–SEGC007*	Haul Road - Segment C	2.74E-03	3.35E-04	1.57E-06	0.00E+00	0.00E+00	0.00E+00	5.55E-03	5.55E-04	6.90E-06
SEGD001–SEGD011*	Haul Road - Segment D	1.93E-02	1.99E-03	1.10E-05	1.38E-02	1.38E-03	6.48E-06	7.28E-04	7.28E-05	9.05E-07
SEGE001–SEGE021*	Haul Road - Segment E	1.27E-02	1.27E-03	7.28E-06	1.06E-02	1.06E-03	4.99E-06	0.00E+00	0.00E+00	0.00E+00
SEGF001–SEGF006*	Haul Road - Segment F	2.60E-03	2.60E-04	1.49E-06	8.31E-05	8.31E-06	3.90E-08	3.59E-08	3.59E-09	4.47E-11
SEGG001–SEGG020*	Haul Road - Segment G	3.96E-03	4.57E-04	2.27E-06	3.09E-03	3.09E-04	1.45E-06	7.28E-04	7.28E-05	9.05E-07
SEGH001–SEGH013*	Haul Road - Segment H	4.40E-04	4.40E-05	2.52E-07	1.58E-07	1.58E-08	7.43E-11	7.24E-04	7.24E-05	9.01E-07
SEGI001–SEGI029*	Haul Road - Segment I	7.87E-04	7.87E-05	4.51E-07	3.09E-03	3.09E-04	1.45E-06	3.73E-06	3.73E-07	4.65E-09
SEGJ001–SEGJ005*	Haul Road - Segment J	1.93E-02	1.99E-03	1.10E-05	1.38E-02	1.38E-03	6.48E-06	6.27E-03	6.27E-04	7.81E-06
SEGK001–SEGK005*	Haul Road - Segment K	3.10E-02	3.16E-03	1.77E-05	4.27E-02	4.27E-03	2.01E-05	3.87E-02	3.87E-03	4.82E-05
SEGL001–SEGL007*	Haul Road - Segment L	1.72E-03	1.72E-04	9.86E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SEGM001–SEGM026*	Haul Road - Segment M	2.63E-03	2.66E-04	1.50E-06	6.79E-08	6.79E-09	3.19E-11	5.92E-03	5.92E-04	7.36E-06
SEGN001–SEGN020*	Haul Road - Segment N	8.08E-04	8.08E-05	4.62E-07	0.00E+00	0.00E+00	0.00E+00	5.92E-03	5.92E-04	7.36E-06
SEGO001–SEGO018*	Haul Road - Segment O	1.13E-02	1.14E-03	6.49E-06	2.11E-02	2.11E-03	9.91E-06	0.00E+00	0.00E+00	0.00E+00
SEGP001–SEGP012*	Haul Road - Segment P	1.13E-02	1.14E-03	6.49E-06	2.11E-02	2.11E-03	9.91E-06	0.00E+00	0.00E+00	0.00E+00
SEGQ001–SEGQ014*	Haul Road - Segment Q	1.13E-02	1.14E-03	6.49E-06	2.82E-02	2.82E-03	1.32E-05	0.00E+00	0.00E+00	0.00E+00
SEGR001–SEGR022*	Haul Road - Segment R	1.28E-02	1.28E-03	7.31E-06	2.82E-02	2.82E-03	1.32E-05	7.86E-11	7.86E-12	9.78E-14
SEGS001–SEGS042*	Haul Road - Segment S	2.17E-03	2.23E-04	1.24E-06	6.79E-08	6.79E-09	3.19E-11	7.86E-11	7.86E-12	9.78E-14

*Multiple modeled sources.

Table 6. 2025 modeling area source parameters

Modeling source ID	Description	UTM: Zone 15 (NAD83)		Base elevation (m)	Height (m)	Length, X (m)	Length, Y (m)	Rotation angle (°)
		Easting (m)	Northing (m)					
TBCNE	Coarse Tailings Beach Area (NE)	488,628.785	5,243,983.705	454.150	5.000	246.000	500.000	-2.530
TBFNE	Fine Tailings Beach Area (NE)	488,508.965	5,243,978.373	454.150	5.000	120.000	500.000	-2.530

Modeling source ID	Description	UTM: Zone 15 (NAD83) Easting (m)	UTM: Zone 15 (NAD83) Northing (m)	Base elevation (m)	Height (m)	Length, X (m)	Length, Y (m)	Rotation angle (°)
TBCSW	Coarse Tailings Beach Area (SW)	486,881.085	5,243,459.241	454.150	5.000	183.000	500.000	-30.000
TBFSW	Fine Tailings Beach Area (SW)	487,050.720	5,243,553.980	454.150	5.000	30.000	500.000	-30.000
TBNEDOZE	Tailings Dozer Traffic (NE)	488,628.790	5,243,983.700	454.150	2.000	246.000	500.000	-2.530
TBSWDOZE	Tailings Dozer Traffic (SW)	486,881.085	5,243,459.241	454.150	2.000	183.000	500.000	-30.000
PIT*	Active Mining Pit	481,317.096	5,243,958.855	450.270	10.000	2065.16 (maximum)	1258.72 (maximum)	0.000

*AREA POLY Source

Table 7. 2025 modeling area and pit source emission rates

Modeling source ID	Description	PM_{10} ($g/s/m^2$)	$PM_{2.5}$ ($g/s/m^2$)	Lead ($g/s/m^2$)
TBCNE	Coarse Tailings Beach Area (NE)	1.00E+00	1.00E+00	1.76E-10
TBFNE	Fine Tailings Beach Area (NE)	1.00E+00	1.00E+00	1.76E-10
TBCSW	Coarse Tailings Beach Area (SW)	1.00E+00	1.00E+00	1.76E-10
TBFSW	Fine Tailings Beach Area (SW)	1.00E+00	1.00E+00	1.76E-10
TBNEDOZE	Tailings Dozer Traffic (NE)	2.00E-06	5.67E-07	1.50E-11
TBSWDOZE	Tailings Dozer Traffic (SW)	2.00E-06	5.67E-07	1.50E-11
PIT	Active Mining Pit (AREA POLY Source)	4.10E-06	4.87E-07	1.29E-10

Table 8. 2012 Class I impacts modeling point source parameters

Modeling source ID	Description	UTM: Zone 15 (NAD83) Easting (m)	UTM: Zone 15 (NAD83) Northing (m)	LCC: 47N 93W (30,60N) X (m)	LCC: 47N 93W (30,60N) Y (m)	Base elevation (m)	Height (m)	Exit temperature (K)	Diameter (m)	Exit Velocity (m/s)	Flow rate (acfm)
SV 001	Primary Ore Crusher	481220.43	5244543.86	-18151.49	38058.77	457.2	26.6	298.2	1.46	15.2	54,000
SV 002	Grizzly Screening Building	481120.39	5244718.42	-18248.19	38227.48	457.4	39.9	298.2	0.98	15.2	24,000
SV 006	Coarse Ore Storage Conveyor	480934.64	5245003.92	-18427.76	38503.42	484.6	33.0	298.2	0.45	15.2	5,000
SV 007	Fine Ore Storage Conveyor	480869.11	5244997.21	-18491.09	38496.93	484.6	33.0	298.2	0.45	15.2	5,000

Modeling source ID	Description	UTM: Zone 15 (NAD83) Easting (m)	UTM: Zone 15 (NAD83) Northing (m)	LCC: 47N 93W (30,60N) X (m)	LCC: 47N 93W (30,60N) Y (m)	Base elevation (m)	Height (m)	Exit temperature (K)	Diameter (m)	Exit Velocity (m/s)	Flow rate (acfm)
SV 008	Coarse Ore Conveyor Gallery	480944.69	5245060.87	*	*	484.6	29.3	302.6	1.22	1.3	3,270
SV 009	Fine Ore Conveyor Gallery	480884.08	5245071.55	*	*	484.6	29.3	302.6	1.22	9.7	23,909
SV 010	Primary Grinding Mill Line 1	481019.35	5245024.38	**	**	466.6	37.2	302.6	1.22	6.0	14,767
SV 011	Primary Grinding Mill Line 2	481019.35	5245024.38	**	**	466.6	37.2	302.6	1.22	6.0	14,767
SV 012	Fire Water Supply Pump - Concentrator	481005.98	5244953.24	-18358.80	38454.44	466.6	5.0	477.6	0.06	64.71	400
SV 013	Emergency Power Generator - Concentrator	481009.70	5244974.32	-18355.21	38474.81	466.6	9.0	588.7	0.30	58.24	9,000
SV 014	Limestone Handling System	483160.70	5247363.13	-16276.32	40783.92	469.2	61.5	298.2	0.21	14.40	1,090
SV 015	Binder Handling System	483164.03	5247372.03	-16273.10	40792.51	469.2	61.5	298.2	0.30	16.47	2,545
SV 016	Hearth Layer Bin	483049.00	5247474.39	-16384.30	40891.45	469.2	40.6	298.2	1.89	15.20	90,315
SV 017	Hearth Layer Feed	483059.96	5247470.28	-16373.71	40887.48	469.2	40.6	298.2	0.55	15.36	7,689
SV 018	Furnace Hood Exhaust	483198.20	5247456.08	-16262.48	40876.37	468.8	100.0	318.2	5.78	15.2	905,062
SV 019	Furnace Waste Gas	483204.40	5247453.73	-16251.23	40905.81	468.8	100.0	318.2	5.00	15.2	658,695
SV 020	Pellet Discharge	483127.60	5247660.05	-16308.34	41070.90	469.2	40.6	298.2	2.90	15.33	213,816
SV 021	Pellet Screening and Handling	483262.30	5247612.78	-16178.14	41025.23	469.2	34.5	298.2	2.71	15.11	185,000
SV 022	Pellet Screenings to Regrind Conveyors	483273.41	5247570.03	-16167.40	40983.90	468.8	29.5	298.2	0.24	15.17	1,500
SV 023	Oxide Pellet Stockpile Conveyor Gallery	483303.93	5247714.23	-16137.91	41123.29	469.2	18.9	319.3	0.76	54.11	52,263
SV 024	Fire Water Booster Pump - Pellet Plant	483103.07	5247272.26	-16332.02	40696.08	469.2	5.0	422.0	0.06	64.71	400
SV 025	Fire Water Supply Pump - Pellet Plant	483101.32	5247267.92	-16333.72	40691.88	469.2	5.0	477.6	0.06	64.71	400

Modeling source ID	Description	UTM: Zone 15 (NAD83) Easting (m)	UTM: Zone 15 (NAD83) Northing (m)	LCC: 47N 93W (30,60N) X (m)	LCC: 47N 93W (30,60N) Y (m)	Base elevation (m)	Height (m)	Exit temperature (K)	Diameter (m)	Exit Velocity (m/s)	Flow rate (acfm)
SV 026	Emergency Power Generator - Pellet Plant	483168.44	5247402.02	-16268.85	40821.50	469.2	50.1	588.7	0.30	58.24	9,000
SV 027	DRI Oxide Pellet Screening and Handling System Line 1	483456.43	5247542.29	-15990.50	40957.11	472.5	23.3	319.3	1.46	24.15	85,966
SV 028	DRI Package Boiler Line 1	483961.99	5247838.70	-15501.86	41243.64	472.5	35.0	453.2	0.61	55.44	34,268
SV 029	DRI Depressurizing Scrubber Line 1	483512.13	5247674.10	-15936.67	41084.51	472.5	93.0	319.3	0.61	36.49	22,556
SV 030	DRI Process Gas Heater Line 1	483506.56	5247677.04	-15942.05	41087.36	472.5	100.0	448.2	2.04	28.43	197,199
SV 034	Fire Water Booster Pump - Furnace	483779.05	5247795.00	-15678.68	41201.39	472.5	23.0	422.0	0.06	64.71	400
SV 035	Fire Water Supply Pump - DRI	483788.41	5247789.36	-15669.64	41195.95	472.5	23.0	477.6	0.06	64.71	400
SV 036	Emergency Power Generator - DRI	483500.15	5247719.40	-15948.25	41128.30	472.5	34.4	588.7	0.30	58.24	9,000
SV 037	Fire Water Booster Pump - Offices	483800.27	5247787.53	-15658.17	41194.18	472.5	23.0	422.0	0.06	64.71	400
SV 038	Emergency Power Generator - Offices	483505.38	5247730.51	-15943.20	41139.03	472.5	34.4	588.7	0.30	24.27	3,750
SV 039	Hydrated Lime Handling System	483662.99	5247481.28	-15790.84	40898.16	472.5	20.0	298.2	0.21	14.40	1,090
SV 040	Calcined Limestone Handling System	483672.31	5247477.63	-15781.83	40894.62	472.5	20.0	298.2	0.21	14.40	1,090
SV 041	Carbon Handling System	483593.09	5247664.38	-15858.41	41075.13	472.5	44.9	298.2	0.21	14.40	1,090
SV 042	Fluorspar Handling System	483732.70	5247474.57	-15723.46	40891.68	472.5	20.0	298.2	0.12	14.40	363
SV 043	Bauxite Handling System	483728.81	5247464.20	-15727.22	40881.65	472.5	20.0	298.2	0.37	14.97	3,330
SV 044	EAF Baghouse Line 1	483716.98	5247601.13	-15738.66	41014.00	472.5	30.0	393.2	4.51	25.02	847,008
SV 045	EAF Vacuum Degasser Line 1	483528.95	5247603.17	-15920.40	41015.96	472.5	44.9	449.8	1.71	11.50	55,736

Modeling source ID	Description	UTM: Zone 15 (NAD83) Easting (m)	UTM: Zone 15 (NAD83) Northing (m)	LCC: 47N 93W (30,60N) X (m)	LCC: 47N 93W (30,60N) Y (m)	Base elevation (m)	Height (m)	Exit temperature (K)	Diameter (m)	Exit Velocity (m/s)	Flow rate (acfm)
SV 047	EAF Baghouse Dust Transfer Line 1	483620.08	5247577.48	-15832.32	40991.13	472.5	22.0	298.2	0.12	17.63	436
SV 048	EAF Indirect Cooling Tower Line 1	483533.11	5247579.89	-15916.38	40993.46	472.5	12.5	301.2	24.14	8.58	8,318,750
SV 050	Vacuum Degasser Boiler	483955.71	5247844.28	-15507.94	41249.03	472.5	17.2	449.8	1.28	11.52	31,393
SV 051	Tunnel Furnace	483789.47	5247650.90	-15668.60	41062.11	472.5	47.5	903.2	1.86	11.67	67,111
SV 054	Direct Cooling Tower	483526.18	5247865.58	-15923.11	41269.60	472.5	12.5	301.2	23.71	8.58	8,020,833
SV 055	Laminar Cooling Tower	483842.24	5247628.86	-15617.59	41040.81	472.5	12.5	301.2	12.68	8.57	2,291,666
SV 056	Fire Water Booster Pump - Steel Mill	483880.64	5247765.00	-15580.48	41172.41	472.5	28.0	422.0	0.06	64.71	400
SV 057	Fire Water Supply Pump - Steel Mill	483872.60	5247768.62	-15588.25	41175.90	472.5	28.0	477.6	0.06	64.71	400
SV 058	Emergency Power Generator - Steel Mill	483889.76	5247772.28	-15571.68	41179.44	472.5	28.0	588.7	0.30	58.24	9,000
SV 059	Pellet Plant - Powder Coating Handling	483043.85	5247418.54	-16389.27	40837.46	469.2	42.7	303.2	0.24	3.31	327
SV 061	DRI Flare Line 1	483501.83	5247806.22	-15946.63	41212.22	472.5	45.0	408.2	0.61	0.27	165
SV 062	DRI P.T.S. Heater Line 1	483530.03	5247664.01	-15919.37	41074.77	472.5	65.0	558.2	0.43	14.96	4,530
SV 063	DRI P.T.S. Depressurizing Scrubber Line 1	483564.65	5247698.29	-15885.91	41107.90	472.5	93.0	319.3	0.61	22.17	13,706
SV 070	DRI Screening & Handling Line 1	483597.56	5247673.01	-15854.10	41083.47	472.5	44.9	319.3	0.61	68.45	42,308
SV 072	DRI Powder Coating Handling	483652.81	5247484.04	-15800.67	40900.82	472.5	21.0	303.2	0.24	3.31	327
SV 073	DRI Pellet Silos Line 1	483453.67	5247573.03	-15993.17	40986.82	472.5	23.3	319.3	0.61	25.59	15,819
SV 075	DRI Process Water Blowdown Line 1	483568.18	5247879.13	-15882.51	41282.69	472.5	25.0	358.2	0.61	0.01	7
SV 076	DRI Quench Cooling Water Blowdown Line 1	483577.44	5247874.65	-15873.56	41278.37	472.5	22.0	333.2	0.76	0.05	47

Modeling source ID	Description	UTM: Zone 15 (NAD83) Easting (m)	UTM: Zone 15 (NAD83) Northing (m)	LCC: 47N 93W (30,60N) X (m)	LCC: 47N 93W (30,60N) Y (m)	Base elevation (m)	Height (m)	Exit temperature (K)	Diameter (m)	Exit Velocity (m/s)	Flow rate (acfm)
SV 084	Primary Grinding Mill Line 3	481019.35	5245024.38	**	**	466.6	37.2	302.6	1.22	5.97	14,767
SV 085	Grizzly Transfer Tower	480896.25	5244765.41	-18464.84	38272.88	468.5	14.4	298.2	0.45	15.18	5,000
SV 086	Non-Magnetic Cobber Rejects Transfer Tower	480841.62	5244854.10	-18517.65	38358.60	467.7	14.1	298.2	0.45	15.18	5,000
SV 087	Secondary Screening Crusher/Cobber Line 1	480835.83	5244765.92	-18523.24	38273.37	468.5	53.2	298.2	1.01	14.86	25,000
SV 088	Secondary Screening Crusher/Cobber Line 2	480837.18	5244773.06	-18521.94	38280.27	468.5	53.2	298.2	1.01	14.86	25,000
SV 089	Secondary Screening Crusher/Cobber Line 3	480838.34	5244779.43	-18520.82	38286.43	468.5	53.2	298.2	1.01	14.86	25,000
SV 090	Secondary Screening Crusher/Cobber Line 4	480839.43	5244786.49	-18519.76	38293.26	468.5	53.2	298.2	1.01	14.86	25,000
SV 092	Lime Bin for Scrubber	483187.04	5247528.70	-16268.23	40958.78	468.8	35.6	298.2	0.61	1.76	1,090

*Building vent, modeled as volume sources.
**Modeled as part of SVCONC.

Table 9. 2012 Class I impacts modeling point source emission rates

Modeling source ID	Description	NO_x Hourly (g/s)	NO_x Annual (g/s)	SO_2 Hourly (g/s)	SO_2 Annual (g/s)	SO_4 Hourly (g/s)	SO_4 Annual (g/s)	PMC* Hourly (g/s)	PMF* Hourly (g/s)	SOA* Hourly (g/s)	EC* Hourly (g/s)
SV 001	Primary Ore Crusher	-	-	-	-	-	-	-	1.40E-01	-	-
SV 002	Grizzly Screening Building	-	-	-	-	-	-	-	6.60E-02	-	-
SV 006	Coarse Ore Storage Conveyor	-	-	-	-	-	-	-	1.90E-02	-	-
SV 007	Fine Ore Storage Conveyor	-	-	-	-	-	-	-	1.90E-02	-	-
SV 008	Coarse Ore Conveyor Gallery	-	-	-	-	-	-	-	1.40E-02	-	-
SV 009	Fine Ore Conveyor Gallery	-	-	-	-	-	-	-	6.50E-02	-	-
SV 010	Primary Grinding Mill Line 1	-	-	-	-	-	-	-	4.30E-02	-	-
SV 011	Primary Grinding Mill Line 2	-	-	-	-	-	-	-	4.30E-02	-	-

Modeling source ID	Description	NO_x		SO_2		SO_4		PMC*	PMF*	SOA*	EC*
		Hourly (g/s)	Annual (g/s)	Hourly (g/s)	Annual (g/s)	Hourly (g/s)	Annual (g/s)	Hourly (g/s)	Hourly (g/s)	Hourly (g/s)	Hourly (g/s)
SV 012	Fire Water Supply Pump - Concentrator	1.30E-02	1.50E-03	8.50E-04	9.70E-05	-	-	-5.40E-20	3.30E-04	1.90E-04	4.00E-04
SV 013	Emergency Power Generator - Concentrator	1.00E-01	1.20E-02	1.80E-03	2.00E-04	-	-	-	1.10E-03	6.20E-04	1.30E-03
SV 014	Limestone Handling System	-	-	-	-	-	-	-	2.70E-03	-	-
SV 015	Binder Handling System	-	-	-	-	-	-	-	1.30E-02	-	-
SV 016	Hearth Layer Bin	-	-	-	-	-	-	-	1.80E-01	-	-
SV 017	Hearth Layer Feed	-	-	-	-	-	-	-	1.50E-02	-	-
SV 018	Furnace Hood Exhaust	4.44E+00	3.65E+00	7.02E+00	5.77E+00	1.00E-01	2.40E-02	2.40E-16	6.20E+00	6.00E-01	3.60E-03
SV 019	Furnace Waste Gas	1.26E+01	1.04E+01	3.77E+00	3.41E+00	5.90E-02	1.40E-02	6.10E-16	4.20E+00	4.10E-01	1.00E-02
SV 020	Pellet Discharge	-	-	-	-	-	-	-	4.20E-01	-	-
SV 021	Pellet Screening and Handling	-	-	-	-	-	-	-	3.70E-01	-	-
SV 022	Pellet Screenings to Regrind Conveyors	-	-	-	-	-	-	-	3.00E-03	-	-
SV 023	Oxide Pellet Stockpile Conveyor Gallery	-	-	-	-	-	-	-	1.00E-01	-	-
SV 024	Fire Water Booster Pump - Pellet Plant	6.70E-03	7.50E-04	5.60E-04	4.90E-05	-	-	-	2.10E-04	1.20E-04	2.60E-04
SV 025	Fire Water Supply Pump - Pellet Plant	1.30E-02	1.50E-03	8.50E-04	9.70E-05	-	-	-5.40E-20	3.30E-04	1.90E-04	4.00E-04
SV 026	Emergency Power Generator - Pellet Plant	1.00E-01	1.20E-02	1.70E-03	1.90E-04	-	-	-	1.10E-03	6.20E-04	1.30E-03
SV 027	DRI Oxide Pellet Screening and Handling System Line 1	-	-	-	-	-	-	-	1.90E-01	-	-
SV 028	DRI Package Boiler Line 1	1.26E+00	3.70E-01	1.40E-02	6.40E-03	-	-	-6.90E-18	2.40E-03	6.70E-02	2.30E-02
SV 029	DRI Depressurizing Scrubber Line 1	-	-	-	-	-	-	-	1.00E-01	-	-
SV 030	DRI Process Gas Heater Line 1	7.64E+00	2.67E+00	1.00E-01	8.30E-02	-	-	-	1.60E-01	8.00E-01	1.40E-01
SV 034	Fire Water Booster Pump - Furnace	6.70E-03	7.50E-04	5.60E-04	4.90E-05	-	-	-	2.10E-04	1.20E-04	2.60E-04

Modeling source ID	Description	NO_x		SO_2		SO_4		PMC*	PMF*	SOA*	EC*
		Hourly (g/s)	Annual (g/s)	Hourly (g/s)	Annual (g/s)	Hourly (g/s)	Annual (g/s)	Hourly (g/s)	Hourly (g/s)	Hourly (g/s)	Hourly (g/s)
SV 035	Fire Water Supply Pump - DRI	1.30E-02	1.50E-03	8.50E-04	9.70E-05	-	-	-5.40E-20	3.30E-04	1.90E-04	4.00E-04
SV 036	Emergency Power Generator - DRI	1.00E-01	1.20E-02	1.80E-03	2.00E-04	-	-	-	1.10E-03	6.20E-04	1.30E-03
SV 037	Fire Water Booster Pump - Offices	6.70E-03	7.50E-04	5.60E-04	4.90E-05	-	-	-	2.10E-04	1.20E-04	2.60E-04
SV 038	Emergency Power Generator - Offices	4.20E-02	4.80E-03	8.40E-04	8.70E-05	-	-	-1.10E-19	4.90E-04	2.80E-04	5.90E-04
SV 039	Hydrated Lime Handling System	-	-	-	-	-	-	-	2.70E-03	-	-
SV 040	Calcined Limestone Handling System	-	-	-	-	-	-	-	2.70E-03	-	-
SV 041	Carbon Handling System	-	-	-	-	-	-	-	2.70E-03	-	-
SV 042	Fluorspar Handling System	-	-	-	-	-	-	-	9.00E-04	-	-
SV 043	Bauxite Handling System	-	-	-	-	-	-	-	1.50E-02	-	-
SV 044	EAF Baghouse Line 1	1.39E+01	6.18E+00	4.11E+00	3.78E+00	4.20E-03	9.70E-04	1.70E-16	1.70E+00	2.70E-01	6.70E-03
SV 045	EAF Vacuum Degasser Line 1	8.10E-01	2.00E-01	4.80E-03	1.20E-03	-	-	6.90E-18	1.80E-03	4.90E-02	1.70E-02
SV 047	EAF Baghouse Dust Transfer Line 1	-	-	-	-	-	-	-	1.10E-03	-	-
SV 048	EAF Indirect Cooling Tower Line 1	-	-	-	-	-	-	-	9.30E-02	-	-
SV 050	Vacuum Degasser Boiler	1.26E+00	1.20E-01	1.40E-02	2.00E-3	-	-	-6.90E-18	2.40E-03	6.70E-02	2.30E-02
SV 051	Tunnel Furnace	6.10E-01	5.60E-01	1.40E-02	7.30E-3	-	-	-	3.40E-03	9.40E-02	3.30E-02
SV 054	Direct Cooling Tower	-	-	-	-	-	-	-	5.70E-02	-	-
SV 055	Laminar Cooling Tower	-	-	-	-	-	-	-	1.40E-02	-	-
SV 056	Fire Water Booster Pump - Steel Mill	6.70E-03	7.50E-04	5.60E-04	4.90E-05	-	-	-	2.10E-04	1.20E-04	2.60E-04
SV 057	Fire Water Supply Pump - Steel Mill	1.30E-02	1.50E-03	8.50E-04	9.70E-05	-	-	-5.40E-20	3.30E-04	1.90E-04	4.00E-04
SV 058	Emergency Power Generator - Steel Mill	1.00E-01	1.20E-02	1.80E-03	2.00E-04	-	-	-	1.10E-03	6.20E-04	1.30E-03

Modeling source ID	Description	NO_x		SO_2		SO_4		PMC*	PMF*	SOA*	EC*
		Hourly (g/s)	Annual (g/s)	Hourly (g/s)	Annual (g/s)	Hourly (g/s)	Annual (g/s)	Hourly (g/s)	Hourly (g/s)	Hourly (g/s)	Hourly (g/s)
SV 059	Pellet Plant - Powder Coating Handling	-	-	-	-	-	-	-	8.00E-04	-	-
SV 061	DRI Flare Line 1	1.50E-02	7.80E-03	1.50E-04	1.30E-04	-	-	-5.40E-20	2.80E-05	7.60E-04	2.60E-04
SV 062	DRI P.T.S. Heater Line 1	1.50E-01	5.10E-02	8.50E-04	1.00E-03	-	-	-8.70E-19	4.50E-04	1.20E-02	4.30E-03
SV 063	DRI P.T.S. Depressurizing Scrubber Line 1	-	-	-	-	-	-	-	6.60E-02	-	-
SV 070	DRI Screening & Handling Line 1	-	-	-	-	-	-	-	1.80E-01	-	-
SV 072	DRI Powder Coating Handling	-	-	-	-	-	-	-	8.00E-04	-	-
SV 073	DRI Pellet Silos Line 1	-	-	-	-	-	-	-	4.00E-02	-	-
SV 084	Primary Grinding Mill Line 3	-	-	-	-	-	-	-	2.90E-02	-	-
SV 085	Grizzly Transfer Tower	-	-	-	-	-	-	-	1.60E-02	-	-
SV 086	Non-Magnetic Cobber Rejects Transfer Tower	-	-	-	-	-	-	-	1.60E-02	-	-
SV 087	Secondary Screening Crusher/Cobber Line 1	-	-	-	-	-	-	-	5.60E-02	-	-
SV 088	Secondary Screening Crusher/Cobber Line 2	-	-	-	-	-	-	-	5.60E-02	-	-
SV 089	Secondary Screening Crusher/Cobber Line 3	-	-	-	-	-	-	-	5.60E-02	-	-
SV 090	Secondary Screening Crusher/Cobber Line 4	-	-	-	-	-	-	-	5.60E-02	-	-
SV 092	Lime Bin for Scrubber	-	-	-	-	-	-	-	2.20E-03	-	-

* PMC = coarse particulate matter (filterable particulate matter less than or equal to 10 µm and greater than 2.5 µm)
PMF = fine particulate matter (filterable particulate matter less than or equal to 2.5 µm)
SOA = secondary organic aerosols
EC = elemental carbon

Table 10. 2012 Class I impacts modeling volume source parameters

Modeling source ID	Description	UTM: Zone 15 (NAD83)		LCC: 47N 93W (30,60N)		Base elevation (m)	Height (m)	SigmaY (m)	SigmaZ (m)
		Easting (m)	Northing (m)	X (m)	Y (m)				
SVCONC	Line 1, 2, and 3 Primary Grinding Mill and Space Heaters (4)	481019.35	5245024.4	-18345.9	38523.2	466.6	17.6	23.3	16.33
SH400	Area 400 Space Heaters (16)	483543.52	5247727.8	-15906.3	41136.4	472.5	7.6	98.8	7.09
SH200	Area 200 Space Heaters (2)	483117.58	5247512.1	-16318	40927.9	468.8	25	40.3	22.56
SH000	Area 000 Space Heaters (2)	480824.98	5244783	-18533.7	38289.9	471.6	24.2	5.9	8.41
MDS001	Mobile Diesel Sources	-	-	-15576	41038	455.4	3.3	293.2	3.08
MDS002	Mobile Diesel Sources	-	-	-18070	37273	434.4	3.3	1105.8	3.08
MDS002b	Mobile Diesel Sources	-	-	-16638	38493	443.8	3.3	1443	3.08
MDS003	Mobile Diesel Sources	-	-	-18070	37273	434.4	3.3	1105.8	3.08
MDS003b	Mobile Diesel Sources	-	-	-16638	38493	443.8	3.3	1443	3.08

Table 11. 2012 Class I impacts modeling volume source emission rates

Modeling source ID	Description	NO_x		SO_2		PM_{10}		PMC*	PMF*	SOA*	EC*
		Hourly (g/s)	Annual (g/s)	Hourly (g/s)	Annual (g/s)	Hourly (g/s)	Annual (g/s)	Hourly (g/s)	Hourly (g/s)	Hourly (g/s)	Hourly (g/s)
SVCONC	Line 1, 2, and 3 Primary Grinding Mill and Space Heaters (4)	5.05E-02	5.10E-02	2.96E-04	2.96E-04	1.19E-01	1.19E-01	-3.50E-18	3.10E-03	8.60E-02	3.00E-02
SH400	Area 400 Space Heaters (16)	2.02E-01	2.02E-01	1.19E-03	1.19E-03	1.92E-02	1.92E-02	-	5.10E-04	1.40E-02	4.80E-03
SH200	Area 200 Space Heaters (2)	2.52E-02	2.60E-02	1.48E-04	1.48E-04	2.40E-03	2.40E-03	-	6.30E-05	1.70E-03	6.00E-04
SH000	Area 000 Space Heaters (2)	2.52E-02	2.60E-02	1.48E-04	1.48E-04	2.40E-03	2.40E-03	-	6.30E-05	1.70E-03	6.00E-04
MDS001	Mobile Diesel Sources (pre-DRI)	1.20E+00	-	4.12E-04	-	2.18E-02	-	-	7.80E-03	4.60E-03	9.50E-03
MDS001	Mobile Diesel Sources (post-DRI)	1.20E+00	-	4.12E-04	-	2.18E-02	-	-	7.80E-03	4.60E-03	9.50E-03
MDS002	Mobile Diesel Sources (pre-DRI)	5.06E+00	-	4.10E-03	-	1.56E-01	-	-	5.58E-02	3.26E-02	6.76E-02
MDS002	Mobile Diesel Sources (post-DRI)	3.71E+00	-	4.80E-03	-	1.07E-01	-	-	3.83E-02	2.24E-02	4.64E-02
MDS002b	Mobile Diesel Sources (pre-DRI)	5.06E+00	-	4.10E-03	-	1.56E-01	-	-	5.58E-02	3.26E-02	6.76E-02
MDS002b	Mobile Diesel Sources (post-DRI)	3.71E+00	-	4.80E-03	-	1.07E-01	-	-	3.83E-02	2.24E-02	4.64E-02
MDS003	Mobile Diesel Sources (pre-DRI)	2.79E+00	-	5.00E-04	-	1.11E-02	-	-	4.00E-03	2.30E-03	4.80E-03

Modeling source ID	Description	NO_x		SO_2		PM_{10}		PMC*	PMF*	SOA*	EC*
		Hourly (g/s)	**Annual** (g/s)	**Hourly** (g/s)	**Annual** (g/s)	**Hourly** (g/s)	**Annual** (g/s)	**Hourly** (g/s)	**Hourly** (g/s)	**Hourly** (g/s)	**Hourly** (g/s)
MDS003	Mobile Diesel Sources (post-DRI)	2.32E+00	-	3.80E-03	-	6.81E-02	-	-	2.44E-02	1.42E-02	2.95E-02
MDS003b	Mobile Diesel Sources (pre-DRI)	2.79E+00	-	5.00E-04	-	1.11E-02	-	-	4.00E-03	2.30E-03	4.80E-03
MDS003b	Mobile Diesel Sources (post-DRI)	2.32E+00	-	3.80E-03	-	6.81E-02	-	-	2.44E-02	1.42E-02	2.95E-02

* PMC = coarse particulate matter (filterable particulate matter less than or equal to 10 µm and greater than 2.5 µm)
PMF = fine particulate matter (filterable particulate matter less than or equal to 2.5 µm)
SOA = secondary organic aerosols
EC = elemental carbon

Appendix C. Material Concentration Sampling Confidence Levels

The Permittee must use the information contained in this appendix as a reference for calculating the upper confidence levels required by this permit. Table 1 below summarizes the lead and fluorides material concentration limits in the permit.

Table 1. Materials with lead and fluorides concentration limits

Subject item	Material	Lead limit	Fluorides limit
COMG 2 (Finished Pellet Handling)	Pellets	2.0 mg/kg	50 mg/kg
COMG 23 (Ore Crushing & Handling)	Crude ore	12 mg/kg	1.0 mg/kg
COMG 47 (Additive Mixing System)	Concentrate	11 mg/kg	1.0 mg/kg
EQUI 252 (Cobber Rejects Transfer Tower)	Waste rock	8.4 mg/kg	0.7 mg/kg

When determining the confidence levels for the materials listed in Table 1, the Permittee must use either the EPA software ProUCL (version 5.2 or higher) or other electronic spreadsheet program.

Equation 1. One-tailed 95% upper confidence limit calculation

$$UCL = \bar{x} + \frac{t_{0.05,n-1} \times s_n}{\sqrt{n}}$$

Where:

UCL = 95% upper confidence limit, mg/kg or percent by weight;
$\bar{x}$ = average lead or fluorides concentration, mg/kg or percent by weight;
$t_{0.05,n-1}$ = critical one-tailed t-value for 95% confidence level and *n-1* degrees of freedom, shown in Table 2 below;
s_n = sample standard deviation, mg/kg or percent by weight; and
n = number of samples.

Table 2. Critical t-values for one-tailed t-distribution and 95% confidence level

Number of samples, *n*	Degrees of freedom, *n-1*	Critical t-value, $t_{0.05,\ n-1}$
2	1	6.314
3	2	2.920
4	3	2.353
5	4	2.132
6	5	2.015
7	6	1.943
8	7	1.895
9	8	1.860
10	9	1.833
11	10	1.812

Number of samples, *n*	Degrees of freedom, *n-1*	Critical t-value, $t_{0.05,\ n-1}$
12	11	1.796
52	51	1.675

Equation 2a. Two-tailed 95% lower confidence interval calculation

$$LCI = \bar{x} - \frac{t_{0.025,n-1} \times s_n}{\sqrt{n}}$$

Equation 2b. Two-tailed 95% upper confidence interval calculation

$$UCI = \bar{x} + \frac{t_{0.025,n-1} \times s_n}{\sqrt{n}}$$

Where:

LCI = 95% lower confidence interval, ng/g;
UCI = 95% upper confidence interval, ng/g;
$\bar{x}$ = average mercury concentration, ng/g;
$t_{0.025,n-1}$ = critical two-tailed t-value for 95% confidence level and *n-1* degrees of freedom, shown in Table 3 below;
s_n = sample standard deviation, ng/g or percent by weight; and
n = number of samples.

Table 3. Critical t-values for two-tailed t-distribution and 95% confidence level

Number of samples, *n*	Degrees of freedom, *n-1*	Critical t-value, $t_{0.025,\ n-1}$
2	1	12.71
3	2	4.303
4	3	3.182
5	4	2.776
6	5	2.571
7	6	2.447
8	7	2.365
9	8	2.306
10	9	2.262
11	10	2.228
12	11	2.201
52	51	2.008

Appendix D. Visible Emissions Checklist

For each visible emissions observation required by the permit, the Permittee must complete a visible emissions checklist that contains all of the following information.

1. Printed name of observer;
2. Signature of observer;
3. Date and time of observation;
4. Indication of process and control equipment performance, either "requires attention" or "does not require attention." (This determination is based upon an observed change in visible emission characteristics from those observed when the source and its pollution control equipment are properly operated and maintained. A change in visible emission characteristics will be indicative of "requires attention.");
5. Description of investigative and corrective actions completed for each “requires attention” observation;
6. Weather conditions (e.g., temperature, cloud cover, wind, precipitation);
7. Indication if plume observations were limited by visible moisture in the plume;
8. Emission unit (EQUI), stack (STRU), fugitive source (FUGI), and/or building (STRU) ID number(s); and
9. Short description of emission unit or fugitive source.

Appendix E. Construction Authorization Equipment List

This appendix contains lists of the emission units and fugitive sources and their design requirements that the Permittee is authorized to construct under Air Emissions Permits 06100067-001, 06100067-004, and 06100067-005.

Table 1. Pellet plant emission units and fugitive sources

Subject item	Description	Maximum design capacity	Authorizing permit action	Permit issuance date	Permit effective date
EQUI 110	Coarse Ore Mill Bay Tunnel 1	1,047 ton/hr	06100067-005	TBD	TBD
EQUI 111	Fine Ore Mill Bay Tunnel 1A	408 ton/hr	06100067-005	TBD	TBD
EQUI 112	Mixing Conveyor	1,378 ton/hr	06100067-005	TBD	TBD
EQUI 113	Mixer	1,378 ton/hr	06100067-005	TBD	TBD
EQUI 114	Hearth Layer Grate Feed	661 ton/hr	06100067-005	TBD	TBD
EQUI 122	Mercury Control Carbon Bin	100 ton/hr	06100067-005	TBD	TBD
EQUI 123	Scrubber Control Lime Bin	25 ton/hr	06100067-005	TBD	TBD
EQUI 124	Hearth Layer Feed Bin	661 ton/hr	06100067-005	TBD	TBD
EQUI 127	Pellet Discharge	1,323 ton/hr	06100067-005	TBD	TBD
EQUI 131	Primary Ore Crusher	5,485 ton/hr	06100067-005	TBD	TBD
EQUI 132	Grizzly Scalping Screen	4,960 ton/hr	06100067-005	TBD	TBD
EQUI 135	Pellet Transfer to Hearth Layer Bin	661 ton/hr	06100067-005	TBD	TBD
EQUI 138	Concentrator Fire Water Supply Pump	311 hp	06100067-005	TBD	TBD
EQUI 139	Concentrator Emergency Power Generator	3,633 hp	06100067-005	TBD	TBD
EQUI 140	Coarse Ore Storage Conveyor	1,047 ton/hr	06100067-005	TBD	TBD
EQUI 141	Fine Ore Storage Conveyor	3,968 ton/hr	06100067-005	TBD	TBD
EQUI 145	Powder Coating Unloading	25 ton/hr	06100067-001	9/7/2007	10/11/2007
EQUI 146	Powder Coating Day Bin	25 ton/hr	06100067-001	9/7/2007	10/11/2007
EQUI 149	Pellet Plant Emergency Power Generator	3,633 hp	06100067-005	TBD	TBD
EQUI 191	Limestone Bin	121 ton/hr	06100067-005	TBD	TBD
EQUI 193	Organic Binder Bin	25 ton/hr	06100067-005	TBD	TBD
EQUI 214	Sodium Carbonate Bin	25 ton/hr	06100067-005	TBD	TBD
EQUI 251	Grizzly Transfer Tower	1,047 ton/hr	06100067-005	TBD	TBD
EQUI 252	Cobber Rejects Transfer Tower	298 ton/hr	06100067-005	TBD	TBD
EQUI 253	Secondary Crusher Line 1	4,260 ton/hr	06100067-005	TBD	TBD
EQUI 254	Secondary Crusher Line 2	4,260 ton/hr	06100067-005	TBD	TBD
EQUI 255	Secondary Crusher Line 3	4,260 ton/hr	06100067-005	TBD	TBD
EQUI 256	Secondary Crusher Line 4	4,260 ton/hr	06100067-005	TBD	TBD
EQUI 257	Indurating Furnace Hood Exhaust	1,072 ton/hr 542 MMBtu/hr	06100067-004	4/6/2012	5/10/2012
EQUI 258	Indurating Furnace Waste Gas	1,072 ton/hr 542 MMBtu/hr	06100067-004	4/6/2012	5/10/2012
EQUI 259	Hearth Layer Separation	1,323 ton/hr	06100067-005	TBD	TBD
EQUI 261	Space Heaters	8 MMBtu/hr	06100067-001	9/7/2007	10/11/2007

Subject item	Description	Maximum design capacity	Authorizing permit action	Permit issuance date	Permit effective date
EQUI 262	Ore Dumping to Crusher	5,485 ton/hr	06100067-005	TBD	TBD
EQUI 263	Coarse Ore Barn Pile Drop	1,047 ton/hr	06100067-005	TBD	TBD
EQUI 264	Fine Ore Barn Pile Drop	3,968 ton/hr	06100067-005	TBD	TBD
EQUI 266	Pellet Plant Fire Water Supply Pump	311 hp	06100067-005	TBD	TBD
EQUI 281	Residual Silo	0.9 ton/hr	06100067-005	TBD	TBD
EQUI 282	Dolomite Bin	121 ton/hr	06100067-005	TBD	TBD
EQUI 283	Bentonite Bin	33 ton/hr	06100067-005	TBD	TBD
EQUI 284	Storage Bin 1	33 ton/hr	06100067-005	TBD	TBD
EQUI 285	Storage Bin 2	33 ton/hr	06100067-005	TBD	TBD
EQUI 286	Product Junction House 2	1,323 ton/hr	06100067-005	TBD	TBD
EQUI 287	Product Junction House 3	1,323 ton/hr	06100067-005	TBD	TBD
EQUI 288	Bentonite Receiving Bin 3	276 ton/hr	06100067-005	TBD	TBD
EQUI 289	Primary Crusher Building Belt Conveyor	4,960 ton/hr	06100067-005	TBD	TBD
EQUI 290	Pneumatic Transport Vent 1	121 ton/hr	06100067-005	TBD	TBD
EQUI 291	Pneumatic Transport Vent 2	121 ton/hr	06100067-005	TBD	TBD
EQUI 293	Rotary Rail Car Dumper	882 ton/hr	06100067-005	TBD	TBD
EQUI 294	2100 Tonne Stone Bin	882 ton/hr	06100067-005	TBD	TBD
EQUI 295	5500 Tonne Limestone Storage Bin	121 ton/hr	06100067-005	TBD	TBD
EQUI 296	5500 Tonne Dolomite Storage Bin	121 ton/hr	06100067-005	TBD	TBD
EQUI 297	Train Unloading Conveyor	882 ton/hr	06100067-005	TBD	TBD
EQUI 298	Overland Conveyor	882 ton/hr	06100067-005	TBD	TBD
EQUI 299	Limestone and Dolomite Grinding Mill	121 ton/hr 25 MMBtu/hr	06100067-005	TBD	TBD
EQUI 300	Pellet Bunker Tripper Conveyor	1,323 ton/hr	06100067-005	TBD	TBD
EQUI 301	Emergency Reclaim Pump	671 hp	06100067-005	TBD	TBD
EQUI 302	Emergency Pit Water Pump	275 hp	06100067-005	TBD	TBD
EQUI 303	Pellet Bunker Product Conveyor	7,937 ton/hr	06100067-005	TBD	TBD
EQUI 304	55 Tonne Day Bin	121 ton/hr	06100067-005	TBD	TBD
EQUI 330	Product Junction House 1	1,323 ton/hr	06100067-005	TBD	TBD
EQUI 331	Product Junction House 4	1,323 ton/hr	06100067-005	TBD	TBD
EQUI 332	Pneumatic Transport Vent 3	33 ton/hr	06100067-005	TBD	TBD
EQUI 333	Coarse Ore Mill Bay Tunnel 2	1,047 ton/hr	06100067-005	TBD	TBD
EQUI 334	Coarse Ore Mill Bay Tunnel 3	1,047 ton/hr	06100067-005	TBD	TBD
EQUI 335	Fine Ore Mill Bay Tunnel 1B	408 ton/hr	06100067-005	TBD	TBD
EQUI 336	Fine Ore Mill Bay Tunnel 2A	408 ton/hr	06100067-005	TBD	TBD
EQUI 337	Fine Ore Mill Bay Tunnel 2B	408 ton/hr	06100067-005	TBD	TBD
EQUI 338	Fine Ore Mill Bay Tunnel 3A	408 ton/hr	06100067-005	TBD	TBD
EQUI 339	Fine Ore Mill Bay Tunnel 3B	408 ton/hr	06100067-005	TBD	TBD
EQUI 340	Bentonite Unloading	276 ton/hr	06100067-005	TBD	TBD
EQUI 341	Bentonite Receiving Bin 1	276 ton/hr	06100067-005	TBD	TBD

Subject item	Description	Maximum design capacity	Authorizing permit action	Permit issuance date	Permit effective date
EQUI 342	Bentonite Receiving Bin 2	276 ton/hr	06100067-005	TBD	TBD
EQUI 343	Secondary Crusher Lines Bin Feed	4,260 ton/hr	06100067-005	TBD	TBD
EQUI 347	Pellet Plant Fines Bin Discharge	1,323 ton/hr	06100067-005	TBD	TBD
EQUI 376	Pellet Loadout	7,937 ton/hr	06100067-005	TBD	TBD
EQUI 383	Alternative Limestone or Dolomite Deliveries	30 ton/hr	06100067-005	TBD	TBD
EQUI 384	Alternative Additive Deliveries	30 ton/hr	06100067-005	TBD	TBD
FUGI 6	Paved Road Emissions	6.1 VMT/hr 53,122 VMT/yr	06100067-005	TBD	TBD
FUGI 13	Out-of-pit Haul Road Emissions	41.8 VMT/hr 280,333 VMT/yr	06100067-005	TBD	TBD
FUGI 16	Crude Ore Loadout	4,820 ton/hr	06100067-005	TBD	TBD
FUGI 20	Service Road Emissions	30.0 VMT/hr 253,785 VMT/yr	06100067-005	TBD	TBD
FUGI 24	Grading at Tailings Basin	4 mph	06100067-005	TBD	TBD
FUGI 25	Dozer Activity at Tailings Basin	1 dozer	06100067-005	TBD	TBD
FUGI 26	Tailings Basin Wind Erosion	71.5 acres	06100067-001	9/7/2007	10/11/2007
FUGI 27	Product Stockpile Wind Erosion	2.19 acres	06100067-001	9/7/2007	10/11/2007
FUGI 28	Overburden/Waste Rock Bulldozer	1 dozer	06100067-005	TBD	TBD
FUGI 29	Overburden/Waste Rock Area Wind Erosion	39.5 acres	06100067-001	9/7/2007	10/11/2007
FUGI 30	Drilling	3 holes/hr	06100067-005	TBD	TBD
FUGI 31	Overburden Loadout	2,700 ton/hr	06100067-005	TBD	TBD
FUGI 32	Overburden Unloading (Truck)	2,700 ton/hr	06100067-005	TBD	TBD
FUGI 33	Waste Rock Loadout	4,513 ton/hr	06100067-005	TBD	TBD
FUGI 34	Waste Rock Unloading (Truck)	4,513 ton/hr	06100067-005	TBD	TBD
FUGI 35	Drop onto Cobber Rejects Pile	298 ton/hr	06100067-005	TBD	TBD
FUGI 36	Cobber Rejects Pile Wind Erosion	0.378 acres	06100067-001	9/7/2007	10/11/2007
FUGI 37	Cobber Rejects Pile Loadout	450 ton/hr	06100067-005	TBD	TBD
FUGI 38	Cobber Rejects Unloading (Truck)	450 ton/hr	06100067-005	TBD	TBD
FUGI 39	Cobber Rejects Stockpile Wind Erosion	4.38 acres	06100067-001	9/7/2007	10/11/2007
FUGI 40	120K ton Concentrate Stockpile Loading	1,400 ton/hr	06100067-005	TBD	TBD
FUGI 41	120K ton Concentrate Stockpile Wind Erosion	1.73 acres	06100067-001	9/7/2007	10/11/2007
FUGI 42	120K ton Concentrate Stockpile Loadout	1,072 ton/hr	06100067-004	4/6/2012	5/10/2012
FUGI 85	Small Limestone and Dolomite Stockpile Wind Erosion	0.100 acres	06100067-005	TBD	TBD
FUGI 86	Large Limestone and Dolomite Stockpile Wind Erosion	1.70 acres	06100067-005	TBD	TBD
FUGI 87	Ore Stockpile Wind Erosion	12.7 acres	06100067-005	TBD	TBD
FUGI 88	Ore Pile Loading	275 ton/hr	06100067-005	TBD	TBD
FUGI 90	Product Stockpile Loadout	1,323 ton/hr	06100067-005	TBD	TBD
FUGI 94	Small Limestone and Dolomite Stockpile Loading	400 ton/hr	06100067-005	TBD	TBD

Subject item	Description	Maximum design capacity	Authorizing permit action	Permit issuance date	Permit effective date
FUGI 95	Small Limestone and Dolomite Stockpile Loadout	300 ton/hr	06100067-005	TBD	TBD
FUGI 96	Large Limestone and Dolomite Stockpile Loading	300 ton/hr	06100067-005	TBD	TBD
FUGI 97	Large Limestone and Dolomite Stockpile Loadout	400 ton/hr	06100067-005	TBD	TBD
FUGI 98	Emergency Product Conveyor from Pellet Discharge	1,323 ton/hr	06100067-005	TBD	TBD
FUGI 99	Product Stockpile Conveyor	1,323 ton/hr	06100067-005	TBD	TBD
FUGI 100	In-pit Haul Roads Emissions	84.9 VMT/hr 569,051 VMT/yr	06100067-005	TBD	TBD
FUGI 101	Blasting	500 blast hole/wk	06100067-005	TBD	TBD
FUGI 184	Ore Stockpile Loadout	421 ton/hr	06100067-005	TBD	TBD

Appendix F. Sulfuric Acid Mist Emissions Calculations

As specified in the permit, the Permittee must use these equations to calculate sulfuric acid mist concentrations and emission rates from the indurating furnace for each hourly data point measured by the each SO_2 CEMS. The Permittee must conduct these calculations for each 1-hour SO_2 value recorded by the appropriate CEMS and calculate a 3-hour rolling average based on the previous three 1-hour values.

Equation 1. Conversion from sulfur dioxide to sulfuric acid mist

$$H_2SO_{4(ppm)} = SO_{2(ppm)} \times F_1 \times F_2$$

Where:

$H_2SO_{4(ppm)}$	=	sulfuric acid mist concentration, ppm;
$SO_{2(ppm)}$	=	sulfur dioxide concentration as determined by CEMS, ppm;
F_1	=	fuel factor, 0.055; and
F_2	=	technology factor, 0.1.

Equation 2. Conversion from parts per million (ppm) to pounds per hour (lb/hr)

$$H_2SO_{4(lb/hr)} = \frac{H_2SO_{4(ppm)} \times Q \times 98.1 \frac{g\ H_2SO_4}{mol\ H_2SO_4} \times 60 \frac{min}{hr} \times 28.3 \frac{L}{ft^3}}{10^6 \times 24.04 \frac{L}{mol} \times 453.6 \frac{g}{lb}}$$

Where:

$H_2SO_{4(lb/hr)}$	=	sulfuric acid mist emission rate, lb/hr;
$H_2SO_{4(ppm)}$	=	sulfuric acid mist concentration, ppm; and
Q	=	dry standard stack flow rate, dscfm.

Appendix G. Indurating Furnace CO_2e calculations

Equation 1: Monthly CO_2e emissions

$$CO_2e = \sum_i (GWP_i \times W_i)$$

Where:

CO_2e = carbon dioxide equivalent emissions, ton;
i = pollutants: CO_2, CH_4, and N_2O;
GWP_i = global warming potential for pollutant *i* (see 40 CFR pt. 98, subp. A, Table A-1); and
W_i = emissions of pollutant *i* (see Equations 2–4, below), ton.

Equation 2: Methane emissions

$$W_{CH_4} = \frac{V_{ng} \times HH_{ng} \times 1.0 \cdot 10^{-3} \frac{kg}{MMBtu}}{907 \frac{kg}{ton}}$$

Where:

W_{CH_4} = methane emissions, ton;
V_{ng} = volume of natural gas used, MMscf;
HH_{ng} = higher heating value of natural gas, MMBtu/MMscf; and
$1.0 \cdot 10^{-3} \frac{kg}{MMBtu}$ = natural gas methane emission factor.

Equation 3: Nitrous oxide emissions

$$W_{N_2O} = \frac{V_{ng} \times HH_{ng} \times 1.0 \cdot 10^{-4} \frac{kg}{MMBtu}}{907 \frac{kg}{ton}}$$

Where:

W_{N_2O} = nitrous oxide emissions, ton;
V_{ng} = volume of natural gas used, MMscf;
HH_{ng} = higher heating value of natural gas, MMBtu/MMscf; and
$1.0 \cdot 10^{-4} \frac{kg}{MMBtu}$ = natural gas nitrous oxide emission factor.

Equation 4: Carbon dioxide emissions

$$W_{CO_2} = \frac{V_{ng} \times HH_{ng} \times 53.06 \frac{kg}{MMBtu}}{907 \frac{kg}{ton}} + \frac{44 \frac{g\ CO_2}{mol}}{12 \frac{g\ C}{mol}} \sum_j (W_j \times C_j)$$

Where:

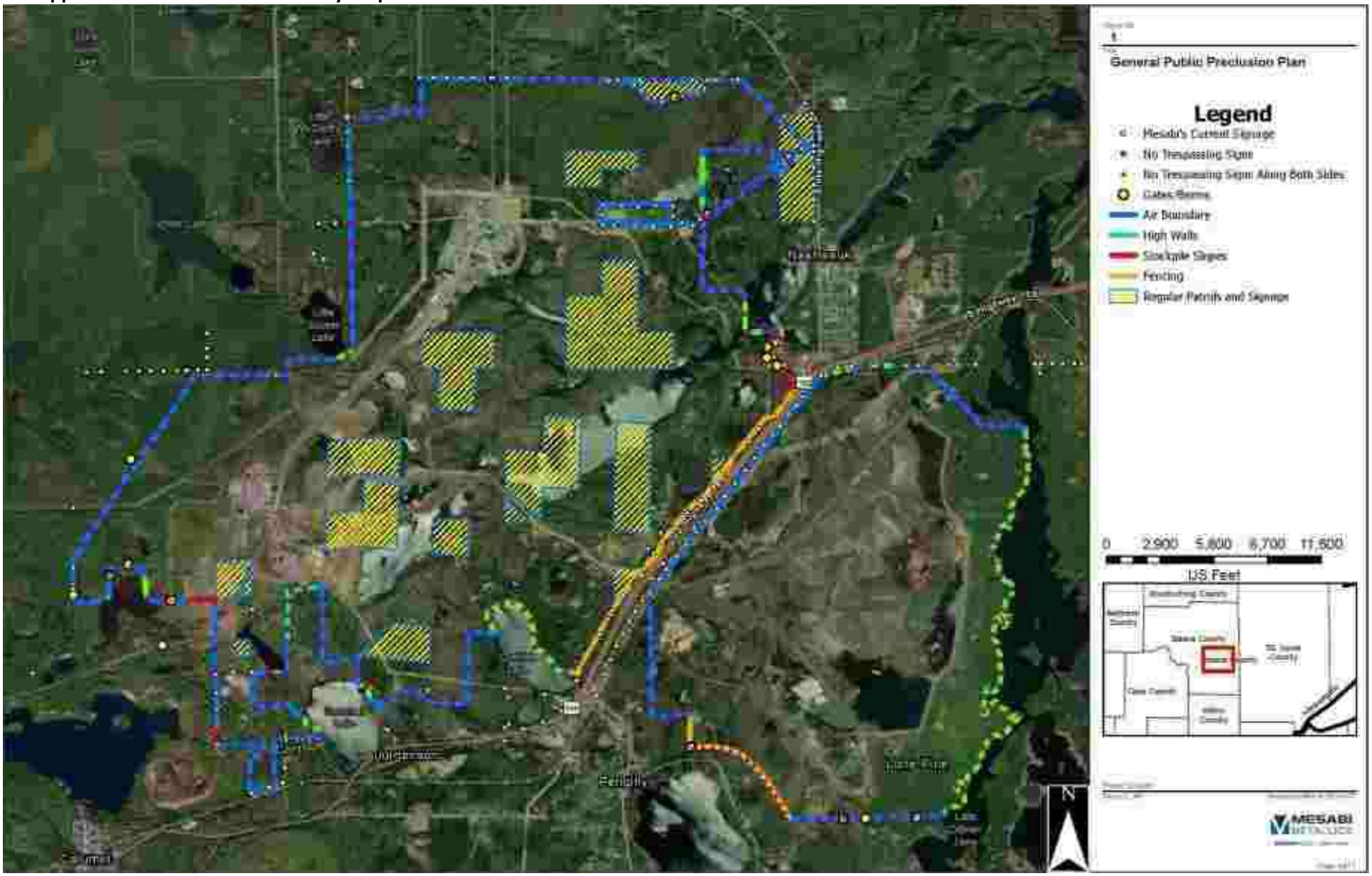
W_{CO_2} = carbon dioxide emissions, ton;
V_{ng} = volume of natural gas used, MMscf;
HH_{ng} = higher heating value of natural gas, MMBtu/MMscf;
$53.06 \frac{kg}{MMBtu}$ = natural gas carbon dioxide emission factor;
$44 \frac{g\ CO_2}{mol}$ = CO_2 molecular weight;
$12 \frac{g\ C}{mol}$ = carbon molecular weight;
j = materials: concentrate, limestone, soda ash, dolomite, and organic binder;

W_j = weight of material *j*, ton; and
C_j = carbon content of material *j* in Table 1 below, lb C/lb material.

Table 1. Material carbon contents

Material	Carbon content, C_j
Concentrate	0.00160 lb/lb
Limestone	0.120 lb/lb
Soda Ash	0.113 lb/lb
Dolomite	0.130 lb/lb
Organic binder	0.443 lb/lb

Appendix H. Ambient Air Boundary Map



Appendix I. Fugitive Dust Control Plan

Mesabi Metallics Company LLC

Fugitive Dust Control Plan

MESABI METALLICS COMPANY LLC

April 2007
Revised August 2009
Revised January 2012
Revised October 2019
Revised July 2020
Revised May 2024
Revised January 2025
Revised August 2025

Mesabi Metallics Company LLC

Fugitive Dust Control Plan

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1.0 Introduction

Mesabi Metallics Company LLC (Mesabi) is constructing an iron ore mine and pellet plant. The facility is located on the western edge of the Mesabi Iron Range, Sections 35 and 36, T57N, R23W in Itasca County between Nashwauk and Pengilly, Minnesota. This site is approximately 15 miles west of Hibbing, Minnesota and 20 miles east of Grand Rapids, Minnesota along Highway 169. The nearest community is Nashwauk, Minnesota. The purpose of this document is to comply with the requirements set forth in 40 CFR 63 Subparts A (General Provisions), RRRRR (Taconite Maximum Achievable Control Technology), BACT, case-by-case MACT, and ambient air quality standard-based requirements. The following Fugitive Dust Control Plan meets these requirements and is also the dust control best management practices (BMPs) used by the mining industry on the Mesabi Iron Range of Northern Minnesota.

2.0 Plan Objectives

The Fugitive Dust Control Plan identifies Mesabi control measures and practices to minimize and control fugitive dust as required by the Title V permit. The plan defines the following:

- Procedures that Mesabi personnel will follow to control emissions
- Fugitive dust levels requiring corrective actions
- Steps that will be followed to bring emissions within appropriate ranges
- Steps that Mesabi will take to demonstrate that corrective procedures are followed and to verify the facility is controlling avoidable fugitive emissions

To meet these objectives, the Fugitive Dust Control Plan:

- Identifies all fugitive emission sources listed in the Title V permit application.
- Identifies the primary and contingent control measures and practices to control and minimize fugitive emissions.
- Identifies visible emissions observation and corrective action requirements.
- Identifies fugitive dust control recordkeeping requirements.
- Identifies fugitive dust control notification requirements.
- Describes fugitive dust control training elements.

This Fugitive Dust Control Plan has been developed to align with and incorporate the requirements of Minnesota Rules Parts 6130.1500, 6130.3000, 6130.3600, and 6130.3700.

- Minn. R. 6130.1500 is addressed through Mesabi's commitment to minimize environmental impacts by using the best available control practices for fugitive dust emissions.
- Minn. R. 6130.3000, is incorporated by ensuring dust suppression measures are in place for all dust-generating activities, including hauling, grading, stockpiling, and processing, and through visible emissions monitoring.
- Minn. R. 6130.3600 is reflected in the plan's procedures for managing dust during inactive periods and stockpile stabilization, and by referencing vegetative cover and surface treatment methods.
- Minn. R. 6130.3700 is incorporated through the use of vegetative cover as a long-term control measure on inactive or reclaimed surfaces.

The plan also defines situations in which operations will be temporarily suspended when visible emissions from dust-generating activities are significant or present a risk of off-site impacts. This ensures compliance with Minnesota Rules and protection of public health and the environment.

3.0 Fugitive Emissions Sources

Table 1 lists the fugitive emission sources identified in the Title V permit, briefly describes the measures and practices employed to control fugitive emissions at each source and identifies the fugitive emission sources that require visible emission observation. These sources are further described below.

3.1 Haul Roads and Service Roads

Haul road sources subject to the plan include:

- Haul Road Emissions (FUGI 13, FUGI 100). This source involves trucks hauling mining materials on unpaved roads. The materials being hauled include surface overburden, waste rock (hauled between the pit and their respective discharge areas), taconite ore (hauled between the pit and the primary crusher or ore pile), and cobber reject (hauled from the crushers to its designated locations). The haul roads on the site will be approximately 9 miles long with sixty-foot-wide lanes.
- Service Road Emissions (FUGI 20). This source involves light vehicles traveling on unpaved roads at the tailings basin facilities.
- Controlling haul road fugitive dust is important for employee safety and equipment maintenance as well as protecting the air quality of the area. Mesabi is committed to minimizing haul road emissions. Haul road dust suppression activities are described in Section 4.

3.2 Paved Roads

Paved road emissions (FUGI 6) occur from the guard shack to the Mobile Equipment Shop (MES).

3.3 Stockpiles

Stockpile sources covered by the dust plan include:

- Oxide Product Stockpile Wind Erosion (FUGI 27)
- Overburden/Waste Rock Area Wind Erosion (FUGI 29)
- Cobber Rejects Pile Wind Erosion (FUGI 36)
- Cobber Rejects Stockpile Wind Erosion (FUGI 39)
- 120K ton Concentrate Stockpile Wind Erosion (FUGI 41)
- Limestone and Dolomite Small Stockpile Wind Erosion (FUGI 85)
- Limestone and Dolomite Large Stockpile Wind Erosion (FUGI 86)
- Ore Stockpile Wind Erosion (FUGI 87)

3.4 Material Transfer Points

Several fugitive dust sources are related to the transfer of materials in the mining and crushing, concentrator, and pelletizer. Future sources may include direct reduced iron, steel mill, and slag processing areas. These sources include:

- Drop onto Cobber Rejects Pile (FUGI 35) – transferring of taconite ore from a conveyor onto the Cobber rejects pile.
- Drop onto 120K ton Concentrate Pile (FUGI 40) – conveyor transfer onto the 120K ton concentrate pile.
- Limestone and Dolomite Small Stockpile Loading (FUGI 94)
- Emergency product conveyor (FUGI 98)
- Oxide Product Stockpile Stacking Conveyor (FUGI 99) – conveyor transfer of oxide product onto the oxide product stockpile.

3.5 Truck Loading and Unloading

There are multiple fugitive sources associated with Truck Loading and Unloading:

- Crude Ore Loadout (FUGI 16) – transfer of blasted ore by shovel to ore trucks.
- Overburden Loadout (FUGI 31) – transfer of blasted waste rock by shovel to trucks.
- Overburden Unloading (Truck) (FUGI 32) – ore truck unloading of overburden at the stockpiles.
- Waste Rock Loadout (FUGI 33) – transfer of blasted waste rock by shovel to ore trucks.
- Waste Rock Unloading (Truck) (FUGI 34) – ore truck unloading of waste rock at the stockpiles.
- Ore Stockpile Loading (FUGI 88) – ore truck unloading of ore at the stockpile
- Ore Stockpile Loadout (FUGI 102) – transfer of ore from the stockpile to the ore trucks
- Cobber Rejects Pile Loadout (FUGI 37) – use of a loader and truck to haul the cobber rejects to the cobber rejects stockpile.
- Cobber Rejects Unloading (Truck) (FUGI 38) – unloading of cobber rejects from a truck to the stockpile.
- 120K ton Concentrate Stockpile Loadout (FUGI 42) – transfer of concentrate to a conveyor by use of a loader.
- Ore Stockpile Loading (FUGI 88)
- Oxide Product Stockpile Loading (FUGI 90)
- Limestone and Dolomite Small Stockpile Loadout (FUGI 95)
- Limestone and Dolomite Large Stockpile Loading (FUGI 96)
- Limestone and Dolomite Large Stockpile Loadout (FUGI 97)

- Ore Stockpile Loadout (FUGI 184)

3.6 Tailings Basin

There are three fugitive sources associated with the tailings basin:

- Grading at Tailings Basin (FUGI 24) – dike building and maintenance.
- Dozer activity at Tailings Basin (FUGI 25) – dike building and maintenance.
- Tailings Basin Wind Erosion (FUGI 26) – tailings basin beach area that is exposed to wind erosion prior to dust control measures.

3.7 Rail Operations and Hauling

Fugitive dust may be generated from railcar movement and the loading and unloading of materials. At Mesabi, rail loading activities occur within a fully covered building, which serves as a primary dust control measure by shielding operations from wind and containing particulate matter. Mesabi may implement the following measures to further minimize dust generation associated with rail operations and hauling:

- **Enclosed Loading Facility:** All loading of materials into railcars is conducted inside a covered building to prevent wind-blown dust and to contain material handling within a controlled environment. *Figure 1*
- **Minimized Drop Heights:** Within the enclosed loading area, drop heights will be minimized to reduce impact dispersion and material disturbance.
- **Material Moisture Control:** The moisture content of loaded materials will be managed to reduce the potential for particulate lift-off. Water spray may be applied during loading if materials are dry or dusty.

3.8 Miscellaneous Sources

There are some fugitive sources listed below that do not fall under the categories described above:

- Drilling (FUGI 30)
- Overburden/Waste Rock Bulldozer (FUGI 28)
- Blasting (FUGI 101)

4.0 Operating Practices and Control Measures

The operating practices and control measures that will be implemented and recorded for the fugitive dust sources identified in Section 3 are described below. Mesabi will train and assign appropriate personnel responsibility to monitor and control fugitive emissions in their areas of responsibility. Mesabi recognizes that continued operations during high visible emissions events may lead to off-site impacts; therefore, operations will be suspended if emissions are determined to be significant, persistent, or present a risk of leaving the property boundary. In addition to water-based suppression methods, Mesabi may also utilize chemical dust suppressant products during freezing conditions or in high-traffic areas. Selection of products will consider environmental safety, application effectiveness, and compatibility with site activities. If chemical suppressants are used, the Fugitive Dust Control Plan will be updated to include product names, application areas, and handling procedures. All chemical applications will be documented and available upon request.

In the event of a temporary idle period when certain sources or the entire site are inactive, Mesabi will continue to implement dust control measures to minimize fugitive emissions. These measures may include the application of chemical dust suppressants, periodic visible emissions checks, and stabilization of disturbed areas, water application, or surface treatments as needed. All dust control activities during idle periods will be documented, and any observations of visible emissions will be investigated and addressed with appropriate corrective actions.

4.1 In and Out of Pit Haul Roads & Service Roads (FUGI 20, FUGI 13 and FUGI 100)

- **Primary Controls:** Watering and other dust suppressant application, limited vehicle speed, road maintenance including crushed rock surfacing, grading, and scarifying as needed depending on road conditions.
- **Contingent Controls:** Increased application of primary controls, further slowing of vehicle speeds, limiting vehicle movements and/or stopping vehicle movements on-site altogether at the affected area.
- **Practices:** The operating practices Mesabi will use include, but are not limited to the following:
    - Mesabi will check the weather forecast and meteorological conditions and perform daily visible emissions checks on all active haul roads during daylight hours. Haul truck drivers will also observe for visible emissions during the shift and report as needed. If visible emissions are observed during the visible emissions check or are reported by an equipment operator, Mesabi will record the observation in the daily visible emissions report, investigate the condition, and take appropriate corrective action including contingent controls to address the visible emissions. The observation of visible emissions does not, in and of itself, demonstrate noncompliance with any applicable requirement

but is a signal to trigger investigation and, if necessary, reasonable and appropriate corrective action.

- Mesabi will maintain daily visible emission check reports based on the visible emissions checks. An exception report will be filed if visible emissions cannot be controlled by usual control strategies. Examples of such exceptions may be water wagon breakdown or extraordinary weather events (extremely hot, dry, freeze-drying, etc.). Employees will inform their supervisor of an exception condition upon discovery so that the report can be filled out.

- Plant staff will also observe for visible emissions during the shift and report as needed. If visible emissions are observed during the visible emissions check or are reported by a plant staff, Mesabi will record the observation in the visible emissions report, investigate the condition and take appropriate corrective action including contingent controls to address the visible emissions.
- If visible emissions are significant or pose a risk of leaving the property boundary, dust-generating activities in the affected area will be temporarily suspended until appropriate corrective measures are implemented.
- To ensure Mesabi is meeting the 90% control efficiency Mesabi will use the following calculation to ensure adequate water is applied to the in and out of pit haul roads. Watering is not required if 0.25 inches of precipitation was received during the previous day, and watering may be discontinued during precipitation. Watering may also be discontinued to ensure worker safety during adverse weather conditions. However, if visible emissions are observed from haul truck traffic, or if the road bed is visibly dry after a precipitation event, additional watering will be completed. Watering is not required for any day with no haul truck operation, even if dry road bed conditions are observed.
- C (% efficiency) = 100 – 0.8*P*d*t/i
- Where:
- *P = Potential average hourly daytime evaporation rate (mm/hr). A value of 0.195 mm/hr is identified for P.*
- *d = Average hourly daytime traffic rate (1/hr)*
- *i = Watering intensity (L/m^2)*
- *t = Time between applications (hr)*
- EPA notes that this equation can be simplified to a minimum daily watering rate for a selected control efficiency as shown below:
- i/t = (P*d)/(100-C) (L/m^2 per hour) * 24 hr/day

- Example:
- For a dry-year, high-traffic scenario (P = 0.195 mm/hr, d = 10 trucks/hour, C = 90%), the minimum daily watering rate is calculated as:
- i/t = (0.195 × 10) / (100 − 90) = 0.195 L/m² per hour

- Over 24 hours:
- $0.195 \times 24 = 4.68$ L/m²/day
- For a 12-ft-wide (3.657 m) haul road, this equals approximately 1,380 gallons/day per 1,000 ft of road. In periods of sustained dry weather, this could represent the upper range of water use needed to maintain 90% control efficiency for each active haul road segment.
- If the minimum watering intensity for 90% control, identified from Equation 3-2 of "Control of Open Fugitive Dust Sources", USEPA Office of Air Quality Planning and Standards, EPA-450/3-88-308, Sept. 1988 is not met on more than three percent of days where watering is required, for each semiannual period, Mesabi will perform a follow-up investigation to determine the cause of the deviations, as well as identify procedures to avoid future deviations. Semiannual periods will include January 1 through June 30th, and July 1st through December 31st calendar blocks. The control efficiency will be by road segment.
- Mesabi proposes to review the facility's mine plan weekly to identify hauling cycle times and number of haul trucks in service for past and proposed operations within the next month of operation.
- The in-pit haul road locations and surface area will be reviewed weekly, for the past week as well as projections for the next calendar month.
- The haul road water applied will be recorded daily for in-pit haul roads for each in-pit haul road segment.
- Mesabi will confirm on a weekly basis that the minimum watering intensities required for 90% control were met. Equation 3-2 from "Control of Open Fugitive Dust Sources", USEPA Office of Air Quality Planning and Standards, EPA-450/3-88-308, Sept. 1988 will be used to identify the control efficiency.
- The minimum watering intensity may be recalculated on a weekly basis for proposed operations. Mesabi may also choose to use a high, worst case, daily traffic rate to avoid frequent recalculation of the minimum watering rate.
- Mesabi proposes to complete a verification study correlating the daily watering intensity and the unpaved road daily moisture level. The completed study will be submitted nine months after MPCA approval of the test plan. Freezing weather occurs for more than six months of the year at Mesabi and affects when watering can be completed safely. The nine-month schedule allows Mesabi to complete the study in late spring if the test plan is approved in late fall. The test plan will be submitted within six months of operation of the primary crusher for production purposes. Preliminary mining activities may be completed prior to crusher operation but these preliminary levels will not generate the traffic intensities needed to support the verification analysis.
- In non-freezing conditions, dust will be controlled by the following strategies:

    - Haul roads will be graded as required.
    - Crushed and screened rock will be added to the road surface to minimize fugitive dust generation.
    - Chemical dust suppressants may also be applied to some high traffic areas for dust control as needed. Mesabi will document the product name, application rate, and location, and update the plan accordingly.

- Slowing of vehicle speeds, limiting vehicle movements and/or stopping vehicle movements altogether at the affected area.

- In freezing conditions, dust will be controlled by the following strategies:
  - Mesabi will apply a dust suppressant in the fall or early winter as freezing conditions prevent watering.
  - Mesabi will also apply dust suppressant in the spring, after the snow has melted, if watering cannot be restarted due to intermittent freezes.
  - Mesabi will apply a dust suppressant if visible emissions are observed from haul trucks during freezing conditions.
  - Watering may be completed periodically during freezing conditions, in areas where watering is deemed to be safe by Mesabi staff, if visible emissions are observed.

- Haul roads will be scarified as necessary.
- New haul road material will be applied as needed.
- Slowing of vehicle speeds, limiting vehicle movements and/or stopping vehicle movements altogether at the affected area.
- Mesabi will maintain adequate watering capacity, including backup in the event of breakdown, to control dust during typical summer conditions.
- Mesabi will maintain daily watering records and chemical application records. The records will include the watering truck identification number, the number of water loads applied per shift, the location of applied water loads, and the operator name. Mesabi will equip each watering truck with the same GPS monitoring system used by the other haul trucks.
- Mesabi will rely on National Weather Service (NWS) reports from the Hibbing Airport to provide a record of daily precipitation and humidity, high and low temperature, wind speed and direction readings, and dew point.
- Vehicle miles traveled (VMT) will be calculated annually based on mine production and a record will be kept on site. This information will be sent to the MPCA annually to incorporate into the annual emissions inventory.
- Mesabi will evaluate new technologies or methods in dust suppression for their technical and economic feasibility as they become commercially available.
- Service Road FUGI 20 has an 80% control efficiency due to the availability of watering activities and addition of chemical dust suppressant during freezing conditions.

Recordkeeping: Mesabi will maintain the following records on site for a minimum of five years:

- Haul Road Fugitive Emissions Exception Report;
- Daily Water Truck Reports;
- Daily weather information as reported by the NWS at the Hibbing Airport;
- Record of any days when haul roads are not watered and reasons for not watering;

- Records of weekly mine plan reviews, haul road location and surface area reviews, and confirmations of watering intensity required for 90% control efficiency;
- Records of any follow-up investigations to determine causes of deviations;
- The application of chemical dust suppressants will be recorded based on the amount of chemical applied;
- Daily Visible Emissions Checklists; and
- Exception reports if needed.

4.3 Paved Roads (FUGI 6)

Primary Controls: Washing or street sweeping as needed.

Contingent Controls: Increased application of primary controls.

Practices: The operating practices Mesabi will use include, but are not limited to the following:

- Daily visible emissions checks on paved roads during daylight hours. Plant staff will also observe for visible emissions during the shift and report as needed. If visible emissions are observed during the visible emissions check or are reported by a plant staff, Mesabi will record the observation in the visible emissions report, investigate the condition and take appropriate corrective action including contingent controls to address the visible emissions. The observation of visible emissions does not, in and of itself, demonstrate noncompliance with any applicable requirement but is a signal to trigger investigation and, if necessary, reasonable and appropriate corrective action.
- Mesabi will maintain daily visible emission check reports based on the visible emissions checks. An exception report will be filed if visible emissions cannot be controlled by usual control strategies. Examples of such exceptions may be water wagon breakdown or extraordinary weather events (extremely hot, dry, freeze-drying, etc.). Employees will inform their supervisor of an exception condition upon discovery so that the report can be filled out. Paved roads will be visually inspected daily, and washing or sweeping will be conducted as needed to prevent visible emissions or track-out. If daily visible emission checks indicate material is being tracked onto public roads, additional controls including on-site truck washing or wheel wash stations will be considered. If a permanent or temporary truck wash is implemented, the Fugitive Dust Control Plan and inspection forms will be updated accordingly.
- If visible emissions are significant or pose a risk of leaving the property boundary, dust-generating activities in the affected area will be temporarily suspended until appropriate corrective measures are implemented.

- Paved road FUGI 6 has a 60% control efficiency due to the availability of watering activities and addition of chemical dust suppressant during freezing conditions.

Recordkeeping: Mesabi will maintain the following records on site for a minimum of five years:

- Daily Visible Emissions Checklists
- Daily Watering Reports
- An exception report if needed

4.4 Stockpiles (FUGI 27, FUGI 29, FUGI 36, FUGI 39, FUGI 41, FUGI 85, FUGI 86, FUGI 87)

Primary Controls: Natural moisture content and material size of the stockpiles. Natural moisture contents range from 0.92% to 5.4% depending on the material and the size of the material. Additionally, moisture contents may be higher due to watering of materials prior to unloading at the stockpiles or due to weather activities.

Contingent Controls: Water spray as needed during non-freezing conditions or use of chemical dust suppressant during freezing conditions. Inactive areas and side slopes of mine stockpiles (FUGI 29) will be reclaimed.

Practices: The operating practices Mesabi will use include, but are not limited to the following:

- Mesabi will perform visible emissions checks on all stockpiles listed above once per day during daylight hours.
- Plant staff will also observe for visible emissions during the shift and report as needed. If visible emissions are observed during the visible emissions check or are reported by a plant staff, Mesabi will record the observation in the visible emissions report, investigate the condition and take appropriate corrective action including contingent controls to address the visible emissions.
- If visible emissions are significant or pose a risk of leaving the property boundary, dust-generating activities in the affected area will be temporarily suspended until appropriate corrective measures are implemented.
- During non-freezing conditions while stockpiles are being developed, water will be applied to stockpile roadways and side slopes, as needed.
- During freezing conditions while stockpiles are being developed, chemical dust suppressants will be applied to stockpile roadways and side slopes, as needed. When chemical dust suppressants are applied, Mesabi will document the product name, application rate, and location, and update the plan accordingly.
- An exception report will be filed if visible emissions cannot be controlled by usual control strategies. Examples of such exceptions may be water wagon breakdown or extraordinary weather events (extremely hot, dry, freeze-drying, etc.). Employees will inform their supervisor of an exception condition upon discovery so that the report can be filled out.

Recordkeeping: Mesabi will maintain the following records on site for a minimum of five years:

- Daily Visible Emissions Checklists; and
- Exception reports if needed.

4.5 Material Transfer Points (FUGI 35, FUGI 40, FUGI 94, FUGI 98,)

Primary Controls: Natural moisture content of materials and watering as needed, along with minimized drop distances from all conveyors and loaders. Natural moisture contents range from 0.92% to 10.0% depending on the material and the size of the material. Additionally, moisture contents may be higher due to watering of materials at different transfer points.

Contingent Controls: Water spray as needed during non-freezing conditions

Practices: The operating practices Mesabi will use include, but are not limited to the following:

- Mesabi will perform visible emissions checks on all active material transfer points once per day during daylight hours.
- Mesabi will minimize the drop distances onto each stockpile as far as practicable.
- Plant staff will also observe for visible emissions during the shift and report as needed. If visible emissions are observed during the visible emissions check or are reported by a plant staff, Mesabi will record the observation in the visible emissions report, investigate the condition, and take appropriate corrective action including contingent controls to address the visible emissions.
- If visible emissions are significant or pose a risk of leaving the property boundary, dust-generating activities in the affected area will be temporarily suspended until appropriate corrective measures are implemented.
- An exception report will be filed if visible emissions cannot be controlled by usual control strategies. Examples of such exceptions may be water wagon breakdown or extraordinary weather events (extremely hot, dry, freeze-drying, etc.). Employees will inform their supervisor of an exception condition upon discovery so that the report can be filled out.

- Material Transfer Points FUGI 40 and FUGI 94, have a 60% control efficiency due to the availability of watering activities and addition of chemical dust suppressant during freezing conditions.

Recordkeeping: Mesabi will maintain the following records on site for a minimum of five years:

- Daily Visible Emissions Checklists; and
- Exception reports if needed.

4.6 Truck Loading and Unloading (FUGI 16, FUGI 31, FUGI 32, FUGI 33, FUGI 34, FUGI 37, FUGI 38, FUGI 42, FUGI 88, FUGI 90, FUGI 95, FUGI 96, FUGI 97, FUGI 102)

Primary Controls: Natural moisture content and size of materials along with watering as needed. The drop distance during truck loading and unloading will also be minimized. Natural moisture contents range from 1.5% (crude ore) to 7.9% (overburden) depending on the material and the size of the material.

Contingent Controls: Operations may temporarily cease until conditions improve if primary controls do not reduce fugitive emissions. FUGI 5 does have the availability of dust suppression if necessary, as a contingent control.

Practices: The operating practices Mesabi will use include, but are not limited to the following:

- Mesabi will perform visible emissions checks on all active truck loading and unloading points once per day during daylight hours.
- Plant staff will also observe for visible emissions during the shift and report as needed. If visible emissions are observed during the visible emissions check or are reported by a plant staff, Mesabi will record the observation in the visible emissions report, investigate the condition, and take appropriate corrective action including contingent controls to address the visible emissions.
- If visible emissions are significant or pose a risk of leaving the property boundary, dust-generating activities in the affected area will be temporarily suspended until appropriate corrective measures are implemented.
- An exception report will be filed if visible emissions cannot be controlled by usual control strategies. Examples of such exceptions may be water wagon breakdown or extraordinary weather events (extremely hot, dry, freeze-drying, etc.). Employees will inform their supervisor of an exception condition upon discovery so that the report can be filled out.

Material Transfer Points FUGI 42,FUGI 90, FUGI 95, FUGI 96 and FUGI 97 have a 60% control efficiency due to the availability of watering activities and addition of chemical dust suppressant during freezing conditions. When chemical dust suppressants are applied, Mesabi will document the product name, application rate, and location, and update the plan accordingly.

Recordkeeping: Mesabi will maintain the following records on site for a minimum of five years:

- Daily Visible Emissions Checklists
- An exception report if needed

4.7 Tailings Basin (FUGI 26)

Primary Controls: Beach area minimization, mulching, vegetation, systematic dumping.

Contingent Controls: Change tailings discharge points.

Practices: The operating practices Mesabi will use include, but are not limited to the following:

- During freezing months (typically late November through early April), mulching will be done to reduce fugitive dust lift-off. When the snow melts, the mulch forms a mat on the tailings thereby minimizing emissions.
- Tailings deposited during winter will be vegetated in early spring before the tailings completely thaw.
- Beach areas developed during non-freezing months (typically early April through late November) will be treated (i.e. mulch applied, vegetated, or application of dust suppressants) as soon as practical to prevent large areas of exposed beach from drying out, especially during freeze drying conditions or hot, windy conditions. Dike construction techniques and water level management will help minimize exposed beach areas, which will be treated in a timely manner to limit the risk of dry conditions on the beaches. Ideally fresh beach will be treated within two weeks, but these activities are dependent on weather conditions and basin configurations. Mulch will be staged on-site to minimize the time necessary for it to be applied once conditions are suitable.
- During construction and, to the extent possible during operations, berms and benches will be graded to gentle slopes to reduce wind resistance, which will limit the potential for fugitive dust emissions.
- Mesabi will maintain a systematic discharge schedule. Tailings may be discharged to only one cell at a time. Idle cells will be vegetated thereby minimizing dust emissions from those portions of the tailings basin. The idle cells will be re-vegetated, if necessary, to maintain adequate vegetation for dust control purposes.
- If visible emissions are significant or pose a risk of leaving the property boundary, dust-generating activities in the affected area will be temporarily suspended until appropriate corrective measures are implemented.

- In addition, the dust suppressing objectives for the active cell include:

  - Maintenance of adequate freeboard around the dike perimeter
  - High interior water levels by maintaining unobstructed gravity flow of slurry toward the decant pool (interior)
  - Adequate pumping capacity allowing for discharge to completely encircle the dike perimeter creating a strong dike and adequate beach to protect the dike.

- If high winds are forecast during the non-freezing months, either the tailings discharge will be moved, or clear water will be pumped onto beach areas that are exposed and are determined to be dry.
- As needed, Mesabi will apply water or chemical dust suppression materials to the tailings basin to control dust during other activities such as dozing and grading of the tailings basin if the natural moisture content is not high enough to reduce dust emissions. When chemical dust suppressants are applied, Mesabi will document the product name, application rate, and location, and update the plan accordingly.
- Plant staff will also observe for visible emissions during the shift and report as needed. If visible emissions are observed during the visible emissions check or are reported by a plant staff, Mesabi will record the observation in the visible emissions report, investigate the condition, and take appropriate corrective action including contingent controls to address the visible emissions.
- An exception report will be filed if visible emissions cannot be controlled by usual control strategies. Examples of such exceptions may be water wagon breakdown or extraordinary weather events (extremely hot, dry, freeze-drying, etc.). Employees will inform their supervisor of an exception condition upon discovery so that the report can be filled out.

Recordkeeping: Mesabi will maintain the following records on site for a minimum of five years:

- Daily Visible Emissions Checklists; and
- Exception report if needed.

4.8 Grading and Dozing (FUGI 24, FUGI 25, FUGI 28)

Primary Controls: Natural moisture content and size of materials along with watering as needed. Natural moisture contents range from 5% (tailings) to 20% (overburden) depending on the material and the size of the material.

Contingent Controls: Operations may temporarily cease until conditions improve if primary controls do not reduce fugitive emissions. FUGI 24 does have the availability of dust suppression watering roads before grading if necessary, as a contingent control.

Practices: The operating practices Mesabi will use include, but are not limited to the following:

- Mesabi will perform visible emissions checks on all active dozing and grading once per day during daylight hours.
- During non-freezing conditions while roads are being graded, water will be applied to roadways as needed.
- During construction and, to the extent possible during operations, berms and benches will be graded to gentle slopes to reduce wind resistance, which will limit the potential for fugitive dust emissions.

- Plant staff will also observe for visible emissions during the shift and report as needed. If visible emissions are observed during the visible emissions check or are reported by a plant staff, Mesabi will record the observation in the visible emissions report, investigate the condition and take appropriate corrective action including contingent controls to address the visible emissions.
- An exception report will be filed if visible emissions cannot be controlled by usual control strategies. Examples of such exceptions may be water wagon breakdown or extraordinary weather events (extremely hot, dry, freeze-drying, etc.). Employees will inform their supervisor of an exception condition upon discovery so that the report can be filled out.

-

Recordkeeping: Mesabi will maintain the following records on site for a minimum of five years:

- Daily Visible Emissions Checklists; and
- Exception reports if needed.

4.9 Drilling Source (FUGI 30)

Practices: The source associated with drilling do not have any primary or contingent controls that eliminate all dust at this time. The drill has a watering system that lubricates the rotary bit and as a byproduct the watering also reduces dust production from the drilling operation.

- When Mesabi is performing drilling operations the watering system will be in use in both freezing and non-freezing conditions.
- An exception report will be filed if the drill watering system fails to function during a drilling operation. Employees will inform their supervisor of an exception condition upon discovery so that the report can be filled out.
- In extreme meteorological conditions where drilling fugitive emissions are leaving the property, operations will temporarily cease until conditions improve.

4.10 Blasting (FUGI 101)

Practices: Blasting activities are managed to achieve safety and emission control.

- Aircraft or unmanned aerial vehicles will be used to monitor site conditions and conduct safety surveillance.
- Mining activities inside the blast safety perimeter will cease during blasting.
- Proper stemming and blast pattern timing will be used to control noise and emissions by directing the blast energy into the rock
- Blasting will occur when meteorological conditions favorable for controlling fugitive emissions, noise, and safety.

- Blasting will comply with Minnesota Administrative Rules Part 6130.3900 and federal MSHA regulations

Recordkeeping: Mesabi will maintain the following records on site for a minimum of five years:

- Date and time of blast;
- Type of explosive used;
- Total pounds of explosives;
- Type of material blasted; and
- Meteorological conditions, including temperature inversions, wind speed and direction.

5.0 Construction

The construction practices and control measures that will be implemented and recorded are listed below. Mesabi will train and assign appropriate personnel on controlling fugitive emissions in their areas of responsibility.

5.1 Construction Roads and Service Roads

Primary Controls: Watering and other dust suppressant application, road maintenance including crushed rock surfacing, grading, and scarifying as needed depending on road conditions.

Contingent Controls: Increased application of primary controls, further slowing of vehicle speeds, limiting vehicle movements and/or stopping vehicle movements altogether at the affected area.

Practices: The operating practices Mesabi will use include, but are not limited to the following:

- Mesabi will check the weather forecast and meteorological conditions and perform daily visible emissions checks on all active haul roads during daylight hours. Haul truck drivers will also observe for visible emissions during the shift and report by radio as needed. If visible emissions are observed during the visible emissions check or are reported by an equipment operator, Mesabi will record the observation in the visible emissions report, investigate the condition and take appropriate corrective action including contingent controls to address the visible emissions. The observation of visible emissions does not, in and of itself, demonstrate noncompliance with any applicable requirement but is a signal to trigger investigation and, if necessary, reasonable and appropriate corrective action.
- Mesabi will maintain daily visible emission check reports based on the visible emissions checks. An exception report will be filed if visible emissions cannot be controlled by usual control strategies. Examples of such exceptions may be water wagon breakdown or extraordinary weather events (extremely hot, dry, freeze-drying, etc.). Employees will inform their supervisor of an exception condition upon discovery so that the report can be filled out.
- If visible emissions are significant or pose a risk of leaving the property boundary, dust-generating activities in the affected area will be temporarily suspended until appropriate corrective measures are implemented.

- In non-freezing conditions, dust will be controlled by the following strategies:

  - Water will be applied to the construction roads during the day and afternoon shifts, as required by weather, traffic, and road conditions. Water trucks will be dispatched and unpaved construction roads will be watered if excessive dusting is encountered. Some weather conditions during the summer months, such as low humidity and high winds, require a higher water frequency. The frequency and amount of water application is adjusted depending on weather conditions.

- Haul roads will be graded as required.
- Crushed and screened rock will be added to the road surface to minimize fugitive dust generation.
- Chemical dust suppressant may also be applied to some high traffic areas for dust control as needed. When chemical dust suppressants are applied, Mesabi will document the product name, application rate, and location, and update the plan accordingly.
- Slowing of vehicle speeds, limiting vehicle movements and/or stopping vehicle movements altogether at the affected area.

- In freezing conditions, dust will be controlled by the following strategies:
  - Solid or liquid chemical dust suppressant will be applied to the haul road in late fall prior to freeze up.
  - Haul roads will be scarified as necessary.
  - New haul road material will be applied as needed.
  - Slowing of vehicle speeds, limiting vehicle movements and/or stopping vehicle movements altogether at the affected area.
- Mesabi will maintain adequate watering capacity, including backup in the event of breakdown, to control dust during typical summer conditions.
- Mesabi will maintain daily watering records and chemical application records. The records will include the watering truck identification number, the number of water loads applied per shift, the location of applied water loads, and the operator name. Mesabi will equip each watering truck with the same GPS monitoring system used by the other haul trucks.
- Mesabi will rely on National Weather Service (NWS) reports from the Hibbing Airport to provide a record of daily precipitation and humidity, high and low temperature, wind speed and direction readings, and dew point.
- Vehicle miles traveled (VMT) will be calculated annually based on mine production and a record will be kept on site. This information will be sent to the MPCA annually to incorporate into the annual emissions inventory.
- Mesabi will evaluate new technologies or methods in dust suppression for their technical and economic feasibility as they become commercially available.

Recordkeeping: Mesabi will maintain the following records on site for a minimum of five years:

- Haul Road Fugitive Emissions Exception Report;
- Daily Water Truck Reports;
- Daily weather information as reported by the NWS at the Hibbing Airport;
- The application of chemical dust suppressants will be recorded based on the amount of chemical applied;
- Daily Visible Emissions Checklists; and
- Exception reports if needed.

5.2 Construction Excavations and Spoilage Stockpiles

Primary Controls: Natural moisture content and material size of the stockpiles. Natural moisture in native soils is typically 20%. Additionally, moisture contents may be higher due to watering of materials prior to unloading at the stockpiles or due to weather activities.

Contingent Controls: Water spray as needed during non-freezing conditions. Inactive areas and side slopes of construction piles and excavations will be reclaimed.

Practices: The operating practices Mesabi will use include, but are not limited to the following:

- Mesabi will perform visible emissions checks on all construction excavations and construction stockpiles once per day during daylight hours when operations are active.
- Plant staff will also observe for visible emissions during the shift and report as needed. If visible emissions are observed during the visible emissions check or are reported by construction staff, Mesabi will record the observation in the visible emissions report, investigate the condition and take appropriate corrective action including contingent controls to address the visible emissions.
- If visible emissions are significant or pose a risk of leaving the property boundary, dust-generating activities in the affected area will be temporarily suspended until appropriate corrective measures are implemented.
- During non-freezing conditions while stockpiles are being developed, water will be applied to stockpile roadways and side slopes, as needed.
- During freezing conditions while stockpiles are being developed, chemical dust suppressants will be applied to stockpile roadways and side slopes, as needed. When chemical dust suppressants are applied, Mesabi will document the product name, application rate, and location, and update the plan accordingly.
- An exception report will be filed if visible emissions cannot be controlled by usual control strategies. Examples of such exceptions may be water wagon breakdown or extraordinary weather events (extremely hot, dry, etc.). Employees will inform their supervisor of an exception condition upon discovery so that the report can be filled out.

Recordkeeping: Mesabi will maintain the following records on site for a minimum of five years:

- Daily Visible Emissions Checklists; and
- Exception reports if needed.

5.3 Tailing Basin Construction

Primary Controls: Natural moisture content and size of materials along with watering as needed. Natural moisture contents range from 5% (tailings) to 20% (overburden) depending on the material and the size of the material.

Contingent Controls: Operations may temporarily cease until conditions improve if primary controls do not reduce fugitive emissions.

Practices: The operating practices Mesabi will use include, but are not limited to the following:

- Mesabi will perform visible emissions checks on all active dozing and basin construction once per day during daylight hours during construction.
- During non-freezing conditions while roads are being graded, water will be applied to roadways as needed.
- During freezing conditions chemical dust suppressants will be applied to access roadways, as needed. When chemical dust suppressants are applied, Mesabi will document the product name, application rate, and location, and update the plan accordingly.
- During construction and, to the extent possible during operations, berms and benches will be graded to gentle slopes to reduce wind resistance, which will limit the potential for fugitive dust emissions.
- Plant staff will also observe for visible emissions during the shift and report as needed. If visible emissions are observed during the visible emissions check or are reported by a plant staff, Mesabi will record the observation in the visible emissions report, investigate the condition and take appropriate corrective action including contingent controls to address the visible emissions.
- If visible emissions are significant or pose a risk of leaving the property boundary, dust-generating activities in the affected area will be temporarily suspended until appropriate corrective measures are implemented.
- An exception report will be filed if visible emissions cannot be controlled by usual control strategies. Examples of such exceptions may be water wagon breakdown or extraordinary weather events (extremely hot, dry, freeze-drying, etc.). Employees will inform their supervisor of an exception condition upon discovery so that the report can be filled out.

Recordkeeping: Mesabi will maintain the following records on site for a minimum of five years:

- Daily Visible Emissions Checklists; and
- Exception reports if needed.

6.0 Recordkeeping

The following records will be maintained at Mesabi for the period specified by the Title V permit:

- Daily Visible Emissions Checks. Mesabi commits to retaining these records for 5 years as required by the existing permit and Minn. R. 7007.0800, subp. 5(C)
- Daily Watering Reports
- Haul Road Fugitive Emissions Exception Reports*
- Service Road Fugitive Emissions Exception Reports*
- Paved Road Fugitive Emissions Exception Reports*
- Stockpiles Fugitive Emissions Exception Reports*
- Material Transfer Points Fugitive Emissions Exception Reports*
- Truck Loading and Unloading Fugitive Emissions Exception Reports*
- Tailings Basin (FUGI 26) Fugitive Emissions Exception Reports*
- Grading and Dozing Fugitive Emissions Exception Reports*
- Drilling Fugitive Emissions Exception Reports*
- Daily Weather Information Reports (from National Weather Service at Hibbing Airport)*
- Employee Training Records*

- *These records are anticipated to be electronic reports generated from the plant process control systems.

7.0 Training

An integral part of the implementation of the Fugitive Dust Control Plan is appropriate training for the personnel whose jobs involve ensuring fugitive dust is adequately controlled. Training will be provided to all personnel at the facility whose jobs directly involved ensuring fugitive dust is adequately controlled. The training will cover a subset of the following subjects as needed:

- Employee Responsibilities
- Forms and Record Keeping
- Reporting
- Corrective Actions
- Maintenance
- Work Orders
- Dust Observation and Visibility Training
- Weather Observations
- Location of Information

In addition to the job-specific training listed above, all Mesabi employees will receive general fugitive dust awareness as part of their annual environmental training. Refresher training will be provided on an annual basis.

8.0 Reporting

Mesabi will notify MPCA if any deviations are made from the plan or if corrective action is required to address fugitive emissions that may adversely impact the general public. Mesabi will also notify the MPCA upon discovery of any visible emissions observed crossing the property line.

The following information will be included in the semi-annual compliance report required by the permit:

- Deviations from the plan
- Instances where fugitive emissions leave the site
- Corrective actions that were not taken consistent with the plan
- Records of all chemical dust suppressant products used, including product name, location, date, and quantity applied.
- Dust control activities implemented during temporary idle periods, if applicable
- If truck wash operations are implemented, records will include truck wash inspection logs, maintenance records, and water usage volumes.

An electronic copy of each semi-annual compliance report and electronic notifications of any deviations from the plan or corrective actions taken to address fugitive emissions will also be provided to the MNDNR. All records described in this plan will be available for review during inspections or will be provided upon request.

Tables

Table 1
List of Fugitive Sources

Fugitive Source ID	Fugitive Source Description	Area	Operating/Control Practice	Daily Visible Emissions Check Required?
FUGI 101	Blasting	Mining and Crushing	None	No
FUGI 30	Drilling	Mining and Crushing	None	Yes
FUGI 31	Overburden Loadout	Mining and Crushing	Natural moisture; water spray as needed during non-freezing conditions	Yes
FUGI 32	Overburden Unloading (Truck)	Mining and Crushing	Natural moisture; water spray as needed during non-freezing conditions	Yes
FUGI 33	Waste Rock Loadout	Mining and Crushing	Natural moisture; water spray as needed during non-freezing conditions	Yes
FUGI 34	Waste Rock Unloading (Truck)	Mining and Crushing	Natural moisture; water spray as needed during non-freezing conditions	Yes
FUGI 16	Crude Ore Loadout	Mining and Crushing	Natural moisture; water spray as needed during non-freezing conditions	Yes
FUGI 13	Out of Pit Haul Road Emissions	Mining and Crushing	Watering and other dust suppressant application; road maintenance	Yes
FUGI 100	In Pit Haul Road Emissions	Mining and Crushing	Watering and other dust suppressant application; road maintenance	Yes
FUGI 20	Service Road Emissions	Mining and Crushing	Watering and other dust suppressant application; road maintenance	Yes
FUGI 6	Paved Road Emissions	Mining and Crushing	Watering and other dust suppressant application; road maintenance	Yes
FUGI 29	Overburden/Waste Rock Area Wind Erosion	Mining and Crushing	Natural moisture; water spray as needed during non-freezing conditions	Yes
FUGI 28	Overburden/Waste	Mining and	Natural moisture; water spray as needed during non-freezing conditions	Yes

Table 1
List of Fugitive Sources

Fugitive Source ID	Fugitive Source Description	Area	Operating/Control Practice	Daily Visible Emissions Check Required?
	Rock Bulldozer	Crushing		
FUGI 35	Drop onto Cobber Rejects Pile	Concentrator	Natural moisture; water spray as needed during non-freezing conditions	Yes
FUGI 36	Cobber Rejects Pile Wind Erosion	Concentrator	Limit drop height; natural moisture; water spray as needed during non-freezing conditions	Yes
FUGI 37	Cobber Rejects Pile Loadout	Concentrator	Natural moisture; water spray as needed during non-freezing conditions	Yes
FUGI 38	Cobber Rejects Unloading (Truck)	Concentrator	Natural moisture; water spray as needed during non-freezing conditions	Yes
FUGI 39	Cobber Rejects Pile Wind Erosion	Concentrator	Limited pile size; natural moisture; water spray as needed during non-freezing conditions	Yes
FUGI 26	Tailing Basin Wind Erosion	Concentrator	Natural moisture of tailings; revegetation	Yes
FUGI 25	Dozer Activity at Tailings Basin	Concentrator	Natural moisture of tailings	Yes
FUGI 24	Grading at Tailings Basin	Concentrator	Natural moisture of tailings	Yes
FUGI 40	Drop onto 120K ton Concentrate Stockpile	Pelletizer	Natural moisture; water spray as needed during non-freezing conditions	Yes
FUGI 41	120K ton Concentrate Stockpile Wind Erosion	Pelletizer	Natural moisture; water spray as needed during non-freezing conditions	Yes
FUGI 42	120K ton	Pelletizer	Natural moisture; water spray as needed during non-freezing conditions	Yes

Table 1
List of Fugitive Sources

Fugitive Source ID	Fugitive Source Description	Area	Operating/Control Practice	Daily Visible Emissions Check Required?
	Concentrate Stockpile Loadout			
FUGI 27	Oxide Product Stockpile Stacking Conveyor	Pelletizer	Natural moisture; water spray as needed during non-freezing conditions	Yes
FUGI 99	Oxide Product Stockpile Wind Erosion	Pelletizer	Natural moisture; water spray as needed during non-freezing conditions	Yes
FUGI 85	Small Limestone and Dolomite Stockpile Wind Erosion	Pellet Plant	Limited pile size; natural moisture; water spray as needed during non-freezing conditions	Yes
FUGI 86	Large Limestone and Dolomite Stockpile Wind Erosion	Pellet Plant	Limited pile size; natural moisture; water spray as needed during non-freezing conditions	Yes
FUGI 87	Ore Stockpile Wind Erosion	Mining and Crushing	Limited pile size; natural moisture; water spray as needed during non-freezing conditions	Yes
FUGI 88	Ore Stockpile Loading	Mining and Crushing	Natural moisture; water spray as needed during non-freezing conditions	Yes
FUGI 90	Oxide Product Stockpile Loadout	Pelletizer	Natural moisture; water spray as needed during non-freezing conditions	Yes
FUGI 94	Small Limestone and Dolomite Stockpile Loading	Pellet Plant	Limited pile size; natural moisture; water spray as needed during non-freezing conditions	Yes
FUGI 95	Small Limestone and Dolomite Stockpile Loadout	Pellet Plant	Limited pile size; natural moisture; water spray as needed during non-freezing conditions	Yes

Table 1
List of Fugitive Sources

Fugitive Source ID	Fugitive Source Description	Area	Operating/Control Practice	Daily Visible Emissions Check Required?
FUGI 96	Large Limestone and Dolomite Stockpile Loading	Pellet Plant	Natural moisture; water spray as needed during non-freezing conditions	Yes
FUGI 86	Large Limestone and Dolomite Stockpile Loadout	Pellet Plant	Natural moisture; water spray as needed during non-freezing conditions	Yes
FUGI 98	Emergency Product Conveyor from Pellet Discharge	Pellet Plant	No controls, process is only used in an emergency	Yes

Permit issued: [month day, year]
Permit expires: [month day, year]

Inspection Forms

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Mine Site Fugitive Emission Check Form
Inspector's Name & Title:_____ *Signature:_____*
Date:_____ *Time:_____* *Weather*
Conditions:_____

Fugitive Emission source		Equipment Operating	Fugitive Emissions Observed	If Fugitive Emissions observed, was corrective action taken	List corrective action taken if any and why	Is there a plan Exception*
FUGI 30	Drilling	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 31	Overburden Loadout	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 32	Overburden Unloading (Truck)	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 33	Waste Rock Loadout	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 34	Waste Rock Unloading (Truck)	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 16	Crude Ore Loadout	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 88	Ore Stockpile Loading	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 13	Haul Road Emissions	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 100	In Pit Haul Road Emissions	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 20	Service Road Emissions through mine and Pit 5	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 6	Paved Road Emissions PCB to End of Road	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 29	Overburden/Waste Rock Area Wind Erosion	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 28	Overburden / Waste Rock Bulldozer	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No

*If yes then an Exception report must be filled out

Concentrator & Crusher Fugitive Emission Check Form

*Inspector's Name & Title:*_____ *Signature:*_____

*Date:*_____ *Time:*_____ *Weather*

*Conditions:*_____

Fugitive Emission source		Equipment Operating	Fugitive Emissions Observed	If Fugitive Emissions observed, was corrective action taken	List corrective action taken if any and why	Is there a plan Exception*
FUGI 35	Drop onto Cobber Rejects Pile	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 36	Cobber Rejects Pile Wind Erosion	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 37	Cobber Rejects Pile Loadout	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 38	Cobber Rejects Unloading (Truck)	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 39	Cobber Rejects Pile Wind Erosion	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 20	Service Road Emissions Plant area	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 20	Service Road Emissions Tailing Pipe Corridor	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 6	Paved Road Emissions (Pellet Plant Warehouse to Crusher	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No

*If yes then an Exception report must be filled out

Pellet Plant Fugitive Emission Check Form

*Inspector's Name & Title:*_____ *Signature:*_____

*Date:*_____ *Time:*_____ *Weather*

*Conditions:*_____

Fugitive Emission source		Equipment Operating	Fugitive Emissions Observed	If Fugitive Emissions observed, was corrective action taken	List corrective action taken if any and why	Is there a plan Exception*
FUGI 40	Drop onto 120K ton Concentrate Stockpile	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 41	120K ton Concentrate Stockpile Wind Erosion	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 40	120K ton Concentrate Stockpile Loadout	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 27	Oxide Product Stockpile Stacking Conveyor	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 27	Oxide Product Stockpile Wind Erosion	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 20	Service Road Emissions (Plant Area)	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 6	Paved Road Emissions (Co 58)	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 6	Paved Road Emissions (Corridor from 58 to Mobile Equipment Shop)	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No

*If yes then an Exception report must be filled out

Tailing Basin Fugitive Emission Check Form

*Inspector's Name & Title:*_____ *Signature:*_____

*Date:*_____ *Time:*_____ *Weather*

*Conditions:*_____

*If yes then an Exception report must be filled out

Fugitive Emission source		Equipment Operating	Fugitive Emissions Observed	If Fugitive Emissions observed, was corrective action taken	List corrective action taken if any and why	Is there a plan Exception*
FUGI 26	Tailing Basin Wind Erosion	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 25	Dozer Activity at Tailings Basin	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 24	Grading at Tailings Basin	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 20	Service Road Emissions (entrances and Pipe bridge)	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 20	Service Road Emissions (North Dam)	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 20	Service Road Emissions (East Dam)	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 20	Service Road Emissions (South Dam)	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 20	Service Road Emissions (Water Reclaim Dam)	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No

Construction Check Form
*Inspector's Name & Title:*_____ *Signature:*_____
*Date:*_____ *Time:*_____ *Weather*
*Conditions:*_____

Fugitive Emission source		Equipment Operating	Fugitive Emissions Observed	If Fugitive Emissions observed, was corrective action taken	List corrective action taken if any and why	Is there a plan Exception*
FUGI 20	Service Road Emissions (Contractor Parking lot)	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 20	Service Road Emissions (Snowball Entrance)	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 20	Service Road Emissions (Corridor road while not Paved)	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 20	Service Road Emissions	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
FUGI 6	Paved Road Emissions Co 58	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
	Construction Excavations Crusher Concentrator	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No
	Construction Excavations Pellet Plant	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA		Yes/ No

*If yes then an Exception report must be filled out

Permit issued: [month day, year]
Permit expires: [month day, year]

Daily Water Truck Log

MESABI METALLICS COMPANY LLC

Permit issued: [month day, year]
Permit expires: [month day, year]

Instructions on How to Fill out Water truck Log

1) Fill out date, time, and your name in the provided fields
2) Check the boxes of the areas that you watered
3) If you watered a stockpile or a transfer point enter the pile code in the space provided.

   The codes are listed on the following page.
4) If you watered areas not listed describe in comments section
5) Enter approximate gallons used

Daily Water Truck Log (Revised 2018)

Tempo ID	Description
FUGI 31	Overburden Loadout
FUGI 32	Overburden Unloading (Truck)
FUGI 33	Waste Rock Loadout
FUGI 34	Waste Rock Unloading (Truck)
FUGI 16	Crude Ore Loadout
FUGI 29	Overburden / Waste Rock Area Wind Erosion
FUGI 28	Overburden / Waste Rock Bulldozer
FUGI 35	Drop onto Cobber Rejects Pile
FUGI 36	Cobber Rejects Pile Wind Erosion
FUGI 37	Cobber Rejects Pile Loadout
FUGI 39	Cobber Rejects Stockpile Wind Erosion
FUGI 26	Tailings Basin Wind Erosion
FUGI 25	Dozer Activity at Tailings Basin
FUGI 24	Grading at Tailings Basin
FUGI 40	120K ton Concentrate

Tempo ID	Description
	Stockpile Loading
FUGI 41	120K ton Concentrate Stockpile Wind Erosion
FUGI 42	120K ton Concentrate Stockpile Loadout
FUGI 27	Oxide Product Stockpile Wind Erosion
FUGI 90	Oxide Product Stockpile Wind Erosion
FUGI 20	Service Roads
FUGI 6	Paved Road Emissions
FUGI 85	Limestone and Dolomite Small Stock Pile Overflow/Loadout
FUGI 86	Limestone and Dolomite Large Stock Pile Overflow/Loadout
FUGI 87	Ore Stockpile Wind Erosion
FUGI 88	Ore Stockpile Loading
FUGI98	Mine Emergency Product Conveyor from Pellet

Tempo ID	Description
	Discharge
FUGI 90	Oxide Product Stockpile Loadout
FUGI 94	Small Limestone and Dolomite Stockpile Loading
FUGI 95	Small Limestone and Dolomite Stockpile Loadout
FUGI 96	Large Limestone and Dolomite Stockpile Loading
FUGI 97	Large Limestone and Dolomite Stockpile Loadout
FUGI 6	Paved Roads
FUGI 13	Haul Roads
FUGI 100	In Pit Haul Roads
FUGI 102	Ore Stockpile Loadout

Daily Water Truck Log (Revised 2018)

Date:_____	Driver Name:_____ Driver Signature:_____
Time:_____	

Area	In Pit Haul Roads	Out of Pit Haul Roads	Crusher & Concentrator Roads	Main Corridor Road	Plant roads	County RD 58 inside of plant	Construction Roads	Stock pile	Other / Transfer points

Stock pile Code / Transfer point code if Watered:_____

Comments:_____

Approximate Gallons used:_____

Date:_____	Driver Name:_____ Driver Signature:_____
Time:_____	

Area	In Pit Haul Roads	Out of Pit Haul Roads	Crusher & Concentrator Roads	Main Corridor Road	Plant roads	County RD 58 inside of plant	Construction Roads	Stock pile	Other / Transfer points

Stock pile Code / Transfer point code if Watered:_____

Comments:_____

Approximate Gallons used:_____

Permit issued: [month day, year]
Permit expires: [month day, year]

Mesabi Metallics Company LLC

Fugitive Emission Exception report

Name:_____ Signature:_____
Date:_____ Time:_____

Reason for Exception Condition

☐ Water truck break down ☐ Freeze-drying conditions

☐ Extreme Heat and Dry ☐ Drill Water system failure ☐ Other

If other explain:

Sources Affected

☐ Paved Roads ☐ Stockpiles

☐ Truck loading/unloading

☐ Tailing Basin ☐ Grading / Dozing ☐ Drilling

☐ Haul Roads ☐ Service roads ☐ Material Transfer Points

☐ Other _____

Enter fugitive (FUGI) ID if known:_____

note FUGI IDs are located in Fugitive Dust Control Plan*

Permit issued: [month day, year]
Permit expires: [month day, year]

Appendix A : Definitions

Term	Definition
Mining Equipment	Large vehicles and machines used in material extraction and handling. This includes haul trucks, front-end loaders, bulldozers, drills, and blasting rigs. These machines stay within the mine footprint and on haul roads.
Construction Equipment	Equipment used for site development, facility installation, road building, and excavation. While similar to mining equipment, this is often associated with contractors or early-phase site work.
Haul Roads	High-traffic gravel roads used by heavy equipment such as haul trucks to move ore, waste rock, or overburden. They are wider, reinforced, and can generate dust, without appropriate mitigation measures, due to frequent heavy loads.
Service Roads	Gravel or dirt roads used by pickup trucks, light-duty vehicles, and utility crews to access infrastructure like pipelines, sediment basins, tailings areas, or inspection points. They are narrower and less traveled than haul roads.
Gravel Roads	General unpaved roads covered in crushed rock, sand, or gravel. All haul roads and service roads on site are considered gravel roads.
Paved Roads	Asphalt or concrete roads within the site used for light vehicle traffic or facility access. These roads may accumulate mud or dust from truck traffic and may need sweeping or washing.
Stockpiles	Mounds or piles of loose material (e.g., ore, overburden, tailings, limestone) stored on site. Dust can be generated from wind erosion, loading/unloading, or equipment driving on or near them without appropriate mitigation measures applied.
Dozing / Grading	Earthmoving activities where heavy equipment pushes, smooths, or levels material. These can disturb dry surfaces and generate dust unless controlled.
Material Transfer Points	Locations where materials are moved (e.g., dropped from a conveyor, transferred to a truck or stockpile). These drops can cause dust if not minimized or controlled.
Truck Loading and Unloading	Operations where excavated material is moved into or out of trucks. High drop heights, dry materials, or fast operations can generate visible emissions.
Visible Emissions (VE)	Dust clouds or plumes that are visibly noticeable to the naked eye. Observing VEs triggers investigation and possibly corrective action.
Fugitive Dust	Uncontrolled airborne dust that escapes from roads, piles, equipment, or open ground, not emitted from a stack or vent. It's a regulatory concern and must be managed.
Dust Suppressant	Water or chemical products applied to surfaces (roads, stockpiles, tailings) to reduce dust. Common products include magnesium chloride, lignin sulfonate, and polymer blends.
Chemical Dust Suppressant	A chemical compound used in place of or in addition to water to suppress dust, especially during freezing conditions. Requires product-specific safety and environmental evaluation.
Water Truck	A mobile vehicle equipped with a tank and spray nozzles used to apply water to unpaved roads and stockpiles to reduce dust. Often equipped with GPS to track coverage, water volumes, and miles traveled.
Dry Brushing / Scraping	Methods to remove mud or dust from vehicle tires or undercarriages before leaving a disturbed area, especially when crossing public roads.
Track-Out	Material that is carried out of the site onto public roads by vehicle tires or undercarriages. It is a regulated source of off-site dust and must be

Term	Definition
	minimized.
Corrective Action	Any action taken to reduce or eliminate dust after a visible emission is observed—such as watering, reducing vehicle speed, pausing work, or adding cover material.
Exception Report	A formal log completed when dust cannot be controlled under normal operating practices, due to equipment failure, extreme weather, or unusual site conditions.
Visible Emissions Check	A daily visual inspection conducted by trained staff to identify fugitive dust from specific sources. These are documented and used to guide response actions.
FUGI ID	A unique identifier assigned to each fugitive dust source in the Title V air permit (e.g., FUGI 13 = Out-of-Pit Haul Roads). Used for inspections, reporting, and tracking control measures.
Title V Permit	A federally mandated air emissions permit required for major sources of air pollution, administered by the MPCA in Minnesota. Includes all fugitive dust control requirements.
Temporarily Cease	A temporary halt of dust-generating activities in response to observed visible emissions, equipment malfunction, or environmental conditions (e.g., high winds) that may result in fugitive dust leaving the property boundary. Operations resume only after corrective measures are implemented or conditions improve.

Appendix B: List of Abbreviations, Acronyms, and Symbols

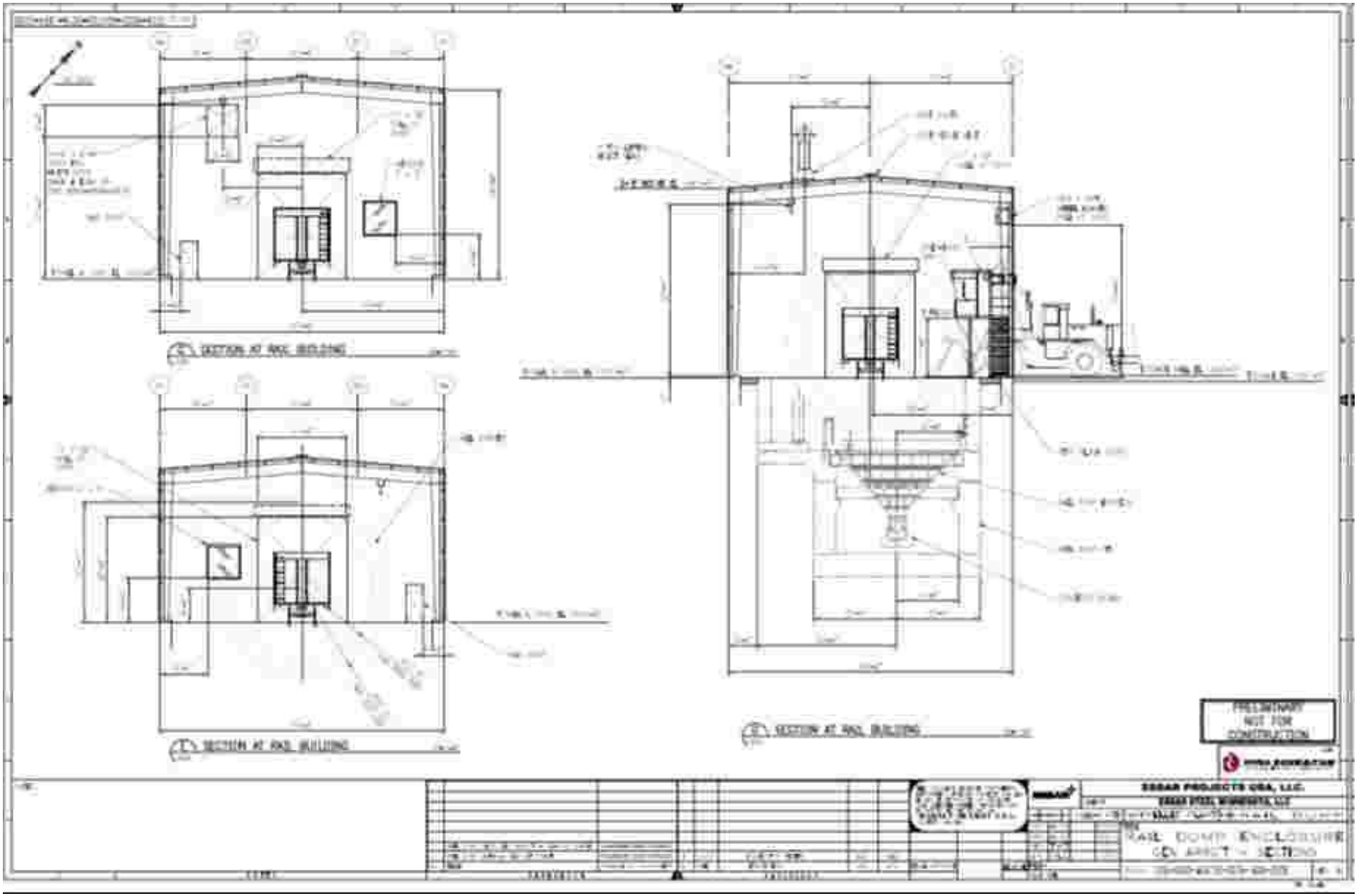
Term / Acronym	Definition
BMP	Best Management Practice
CFR	Code of Federal Regulations
DNR	Minnesota Department of Natural Resources
EPA	United States Environmental Protection Agency
FDCP	Fugitive Dust Control Plan
FUGI	Fugitive Emission Source ID (used throughout the Title V air permit)
gal	Gallons
GPD	Gallons per Day
GPS	Global Positioning System
L/m^2	Liters per square meter
MACT	Maximum Achievable Control Technology
MES	Mobile Equipment Shop
MPCA	Minnesota Pollution Control Agency
MSHA	Mine Safety and Health Administration
NPDES	National Polluant Discharge Elimination System
NWS	National Weather Service
PTE	Potential to Emit
R.	Range (Public Land Survey System)
Subp.	Subpart (used in legal citations)
SWPPP	Stormwater Pollution Prevention Plan
T.	Township (Public Land Survey System)
TSP	Total Suspended Particulates
VMT	Vehicle Miles Traveled
°F	Degrees Fahrenheit

Permit issued: [month day, year]
Permit expires: [month day, year]

Figures

Permit issued: [month day, year]
Permit expires: [month day, year]

Process Flow Diagram for Rail Car Loadout Area


PRELIMINARY
NOT FOR
CONSTRUCTION
ESSAR PROJECTS USA, LLC.
RAIL DUMP ENCLOSURE

Permit issued: [month day, year]
Permit expires: [month day, year]

Paved Vs. Haul Roads figure

Mesabi Haul and Access Roads
Legend
Proposed Amended Permit To Mine Mining Area
120ft-wide Haul Road Corridor
Paved Road
Road to be Paved
Single Track Property Owner Access Road
Gravel Road
Stantec

Appendix J. 40 CFR pt. 60, subp. A—General Provisions

§ 60.1 Applicability.

(a) Except as provided in subparts B, Ba, and C of this part, the provisions of this part apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.

(b) Any new or revised standard of performance promulgated pursuant to section 111(b) of the Act shall apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of such new or revised standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.

(c) In addition to complying with the provisions of this part, the owner or operator of an affected facility may be required to obtain an operating permit issued to stationary sources by an authorized State air pollution control agency or by the Administrator of the U.S. Environmental Protection Agency (EPA) pursuant to Title V of the Clean Air Act (Act) as amended November 15, 1990 (42 U.S.C. 7661). For more information about obtaining an operating permit see part 70 of this chapter.

(d) *Site-specific standard for Merck & Co., Inc.'s Stonewall Plant in Elkton, Virginia.*

(1) This paragraph applies only to the pharmaceutical manufacturing facility, commonly referred to as the Stonewall Plant, located at Route 340 South, in Elkton, Virginia (“site”).

(2) Except for compliance with 40 CFR 60.49b(u), the site shall have the option of either complying directly with the requirements of this part, or reducing the site-wide emissions caps in accordance with the procedures set forth in a permit issued pursuant to 40 CFR 52.2454. If the site chooses the option of reducing the site-wide emissions caps in accordance with the procedures set forth in such permit, the requirements of such permit shall apply in lieu of the otherwise applicable requirements of this part.

(3) Notwithstanding the provisions of paragraph (d)(2) of this section, for any provisions of this part except for Subpart Kb, the owner/operator of the site shall comply with the applicable provisions of this part if the Administrator determines that compliance with the provisions of this part is necessary for achieving the objectives of the regulation and the Administrator notifies the site in accordance with the provisions of the permit issued pursuant to 40 CFR 52.2454.

§ 60.2 Definitions.

The terms used in this part are defined in the Act or in this section as follows:

Act means the Clean Air Act (42 U.S.C. 7401 *et seq.*)

Administrator means the Administrator of the Environmental Protection Agency or his authorized representative.

Affected facility means, with reference to a stationary source, any apparatus to which a standard is applicable.

Alternative method means any method of sampling and analyzing for an air pollutant which is not a reference or equivalent method but which has been demonstrated to the Administrator's satisfaction to, in specific cases, produce results adequate for his determination of compliance.

Approved permit program means a State permit program approved by the Administrator as meeting the requirements of part 70 of this chapter or a Federal permit program established in this chapter pursuant to Title V of the Act (42 U.S.C. 7661).

Capital expenditure means an expenditure for a physical or operational change to an existing facility which exceeds the product of the applicable “annual asset guideline repair allowance percentage” specified in the

latest edition of Internal Revenue Service (IRS) Publication 534 and the existing facility's basis, as defined by section 1012 of the Internal Revenue Code. However, the total expenditure for a physical or operational change to an existing facility must not be reduced by any "excluded additions" as defined in IRS Publication 534, as would be done for tax purposes.

Clean coal technology demonstration project means a project using funds appropriated under the heading 'Department of Energy-Clean Coal Technology', up to a total amount of $2,500,000,000 for commercial demonstrations of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency.

Commenced means, with respect to the definition of *new source* in section 111(a)(2) of the Act, that an owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.

Construction means fabrication, erection, or installation of an affected facility.

Continuous monitoring system means the total equipment, required under the emission monitoring sections in applicable subparts, used to sample and condition (if applicable), to analyze, and to provide a permanent record of emissions or process parameters.

Electric utility steam generating unit means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

Equivalent method means any method of sampling and analyzing for an air pollutant which has been demonstrated to the Administrator's satisfaction to have a consistent and quantitatively known relationship to the reference method, under specified conditions.

Excess Emissions and Monitoring Systems Performance Report is a report that must be submitted periodically by a source in order to provide data on its compliance with stated emission limits and operating parameters, and on the performance of its monitoring systems.

Existing facility means, with reference to a stationary source, any apparatus of the type for which a standard is promulgated in this part, and the construction or modification of which was commenced before the date of proposal of that standard; or any apparatus which could be altered in such a way as to be of that type.

Force majeure means, for purposes of § 60.8, an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents the owner or operator from complying with the regulatory requirement to conduct performance tests within the specified timeframe despite the affected facility's best efforts to fulfill the obligation. Examples of such events are acts of nature, acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility.

Isokinetic sampling means sampling in which the linear velocity of the gas entering the sampling nozzle is equal to that of the undisturbed gas stream at the sample point.

Issuance of a part 70 permit will occur, if the State is the permitting authority, in accordance with the requirements of part 70 of this chapter and the applicable, approved State permit program. When the EPA is the permitting authority, issuance of a Title V permit occurs immediately after the EPA takes final action on the final permit.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Modification means any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted.

Monitoring device means the total equipment, required under the monitoring of operations sections in applicable subparts, used to measure and record (if applicable) process parameters.

Nitrogen oxides means all oxides of nitrogen except nitrous oxide, as measured by test methods set forth in this part.

One-hour period means any 60-minute period commencing on the hour.

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

Owner or operator means any person who owns, leases, operates, controls, or supervises an affected facility or a stationary source of which an affected facility is a part.

Part 70 permit means any permit issued, renewed, or revised pursuant to part 70 of this chapter.

Particulate matter means any finely divided solid or liquid material, other than uncombined water, as measured by the reference methods specified under each applicable subpart, or an equivalent or alternative method.

Permit program means a comprehensive State operating permit system established pursuant to title V of the Act (42 U.S.C. 7661) and regulations codified in part 70 of this chapter and applicable State regulations, or a comprehensive Federal operating permit system established pursuant to title V of the Act and regulations codified in this chapter.

Permitting authority means:

(1) The State air pollution control agency, local agency, other State agency, or other agency authorized by the Administrator to carry out a permit program under part 70 of this chapter; or

(2) The Administrator, in the case of EPA-implemented permit programs under title V of the Act (42 U.S.C. 7661).

Proportional sampling means sampling at a rate that produces a constant ratio of sampling rate to stack gas flow rate.

Reactivation of a very clean coal-fired electric utility steam generating unit means any physical change or change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation where the unit:

(1) Has not been in operation for the two-year period prior to the enactment of the Clean Air Act Amendments of 1990, and the emissions from such unit continue to be carried in the permitting authority's emissions inventory at the time of enactment;

(2) Was equipped prior to shut-down with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85 percent and a removal efficiency for particulates of no less than 98 percent;

(3) Is equipped with low-NO_X burners prior to the time of commencement of operations following reactivation; and

(4) Is otherwise in compliance with the requirements of the Clean Air Act.

Reference method means any method of sampling and analyzing for an air pollutant as specified in the applicable subpart.

Repowering means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the Administrator, in consultation with the Secretary of Energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990. Repowering shall also include any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.

Run means the net period of time during which an emission sample is collected. Unless otherwise specified, a run may be either intermittent or continuous within the limits of good engineering practice.

Shutdown means the cessation of operation of an affected facility for any purpose.

Six-minute period means any one of the 10 equal parts of a one-hour period.

Standard means a standard of performance proposed or promulgated under this part.

Standard conditions means a temperature of 293 K (68F) and a pressure of 101.3 kilopascals (29.92 in Hg).

Startup means the setting in operation of an affected facility for any purpose.

State means all non-Federal authorities, including local agencies, interstate associations, and State-wide programs, that have delegated authority to implement:

(1) The provisions of this part; and/or

(2) the permit program established under part 70 of this chapter. The term State shall have its conventional meaning where clear from the context.

Stationary source means any building, structure, facility, or installation which emits or may emit any air pollutant.

Title V permit means any permit issued, renewed, or revised pursuant to Federal or State regulations established to implement title V of the Act (42 U.S.C. 7661). A title V permit issued by a State permitting authority is called a part 70 permit in this part.

Volatile Organic Compound means any organic compound which participates in atmospheric photochemical reactions; or which is measured by a reference method, an equivalent method, an alternative method, or which is determined by procedures specified under any subpart.

§ 60.3 Units and abbreviations.

Used in this part are abbreviations and symbols of units of measure. These are defined as follows:

(a) System International (SI) units of measure:

A—ampere

g—gram

Hz—hertz

J—joule

K—degree Kelvin

kg—kilogram

m—meter

m^3—cubic meter

mg—milligram—10^{-3} gram

mm—millimeter—10^{-3} meter

Mg—megagram—10^6 gram

mol—mole

N—newton

ng—nanogram—10^{-9} gram

nm—nanometer—10^{-9} meter

Pa—pascal

s—second

V—volt

W—watt

Ω—ohm

µg—microgram—10^{-6} gram

(b) Other units of measure:

Btu—British thermal unit

°C—degree Celsius (centigrade)

cal—calorie

cfm—cubic feet per minute

cu ft—cubic feet

dcf—dry cubic feet

dcm—dry cubic meter

dscf—dry cubic feet at standard conditions

dscm—dry cubic meter at standard conditions

eq—equivalent

°F—degree Fahrenheit

ft—feet

gal—gallon

gr—grain

g-eq—gram equivalent

hr—hour

in—inch

k—1,000

l—liter

lpm—liter per minute

lb—pound

meq—milliequivalent

min—minute

ml—milliliter

mol. wt.—molecular weight

ppb—parts per billion

ppm—parts per million

psia—pounds per square inch absolute

psig—pounds per square inch gage

°R—degree Rankine

scf—cubic feet at standard conditions

scfh—cubic feet per hour at standard conditions

scm—cubic meter at standard conditions

sec—second

sq ft—square feet

std—at standard conditions

(c) Chemical nomenclature:

CdS—cadmium sulfide

CO—carbon monoxide

CO_2—carbon dioxide

HCl—hydrochloric acid

Hg—mercury

H_2O—water

H_2S—hydrogen sulfide

H_2SO_4—sulfuric acid

N_2—nitrogen

NO—nitric oxide

NO_2—nitrogen dioxide

NO_X—nitrogen oxides

O_2—oxygen

SO_2—sulfur dioxide

SO_3—sulfur trioxide

SO_x—sulfur oxides

(d) Miscellaneous:

A.S.T.M.—American Society for Testing and Materials

§ 60.4 Address.

(a) All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this part shall be submitted in duplicate to the appropriate Regional Office of the U.S. Environmental Protection Agency to the attention of the Director of the Division indicated in the following table.

Table 1 to Paragraph (a)

Region	Address	State
I	Director, Enforcement and Compliance Assurance Division, U.S. EPA Region I, 5 Post Office Square—Suite 100 (04-2), Boston, MA 02109-3912, Attn: Air Compliance Clerk	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont.
II	Director, Air and Waste Management Division, U.S. Environmental Protection Agency, Federal Office Building, 26 Federal Plaza (Foley Square), New York, NY 10278	New Jersey, New York, Puerto Rico, Virgin Islands.
III	Director, Air Protection Division, Mail Code 3AP00, 1650 Arch Street, Philadelphia, PA 19103-2029	Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia.
IV	Director, Air and Radiation Division, 61 Forsyth Street SW, Atlanta, Georgia 30303-8960	Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee.
V	Director, Air and Radiation Division, U.S. Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, IL 60604-3590	Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin.
VI	Director; Enforcement and Compliance Assurance Division; U.S. Environmental Protection Agency, 1201 Elm Street, Suite 500, Mail Code 6ECD, Dallas, Texas 75270-2102	Arkansas, Louisiana, New Mexico, Oklahoma, Texas.
VII	Director, Air and Waste Management Division, 11201 Renner Boulevard, Lenexa, Kansas 66219	Iowa, Kansas, Missouri, Nebraska.
VIII	Director, Air and Toxics Technical Enforcement Program, Office of Enforcement, Compliance and Environmental Justice, Mail Code 8ENF-AT, 1595 Wynkoop Street, Denver, CO 80202-1129	Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming.
IX	Director, Enforcement and Compliance Assurance Division (ENF 2-1), U.S. Environmental Protection Agency Region	Arizona, California, Hawaii and Nevada; the territories of American Samoa and Guam; the Commonwealth of the Northern Mariana Islands; the territories of Baker Island, Howland Island, Jarvis Island, Johnston Atoll,

Table 1 to Paragraph (a)		
Region	**Address**	**State**
	IX, 75 Hawthorne Street, San Francisco, CA 94105	Kingman Reef, Midway Atoll, Palmyra Atoll, and Wake Islands; and certain U.S. Government activities in the freely associated states of the Republic of the Marshall Islands, the Federated States of Micronesia, and the Republic of Palau.
X	Director, Air and Waste Management Division, U.S. Environmental Protection Agency, 1200 Sixth Avenue, Seattle, WA 98101	Alaska, Oregon, Idaho, Washington.

(b) Section 111(c) directs the Administrator to delegate to each State, when appropriate, the authority to implement and enforce standards of performance for new stationary sources located in such State. All information required to be submitted to EPA under paragraph (a) of this section, must also be submitted to the appropriate State Agency of any State to which this authority has been delegated (provided, that each specific delegation may except sources from a certain Federal or State reporting requirement). The appropriate mailing address for those States whose delegation request has been approved is as follows:

(1) [Reserved]

(2) State of Alabama: Alabama Department of Environmental Management, P.O. Box 301463, Montgomery, Alabama 36130-1463.

(3) State of Alaska, Department of Environmental Conservation, Pouch O, Juneau, AK 99811.

(4) Arizona:

Arizona Department of Environmental Quality, Suite #160, 1110 West Washington Street, Phoenix, AZ 85007.

Maricopa County Air Quality Department, 301 West Jefferson Street, Phoenix, AZ 85003.

Pima County Department of Environmental Quality, 33 North Stone Avenue, Suite 700, Tucson, AZ 85701.

Pinal County Air Quality Department, 31 North Pinal Street, Building F, Florence, AZ 85132.

Note 1 to paragraph (b)(4):

For tables listing the delegation status of agencies in Region IX, see paragraph (d) of this section.

(5) State of Arkansas: Chief, Division of Air Pollution Control, Arkansas Department of Pollution Control and Ecology, 8001 National Drive, P.O. Box 9583, Little Rock, AR 72209.

(6) California:

Amador Air District, 810 Court Street, Jackson, CA 95642.

Antelope Valley Air Quality Management District, 2551 W Avenue H, Lancaster, CA 93536.

Bay Area Air Quality Management District, 375 Beale Street, Suite 600, San Francisco, CA 94105.

Butte County Air Quality Management District, 629 Entler Avenue, Suite 15, Chico, CA 95928.

Calaveras County Air Pollution Control District, 891 Mountain Ranch Road, Building E, San Andreas, CA 95249.

Colusa County Air Pollution Control District, 100 Sunrise Blvd., Suite A, Colusa, CA 95932-3246.

El Dorado County Air Quality Management District, 330 Fair Lane, Placerville, CA 95667-4100.

Eastern Kern Air Pollution Control District, 2700 “M” Street, Suite 302, Bakersfield, CA 93301-2370.

Feather River Air Quality Management District, 541 Washington Avenue, Yuba City, CA 95991.

Glenn County Air Pollution Control District, 720 N Colusa Street, P.O. Box 351, Willows, CA 95988-0351.

Great Basin Unified Air Pollution Control District, 157 Short Street, Bishop, CA 93514-3537.

Imperial County Air Pollution Control District, 150 South Ninth Street, El Centro, CA 92243-2839.

Lake County Air Quality Management District, 2617 S Main St., Lakeport, CA 95453-5405.

Lassen County Air Pollution Control District, 720 South St., Susanville, CA 96130.

Mariposa County Air Pollution Control District, P.O. Box 5, Mariposa, CA 95338.

Mendocino County Air Quality Management District, 306 E Gobbi Street, Ukiah, CA 95482-5511.

Modoc County Air Pollution Control District, 202 W 4th Street, Alturas, CA 96101.

Mojave Desert Air Quality Management District, 14306 Park Avenue, Victorville, CA 92392-2310.

Monterey Bay Air Resources District, 24580 Silver Cloud Court, Monterey, CA 93940.

North Coast Unified Air Quality Management District, 707 L Street, Eureka, CA 95501-3327.

Northern Sierra Air Quality Management District, 200 Litton Drive, Suite 320, Grass Valley, CA 95945-2509.

Northern Sonoma County Air Pollution Control District, 150 Matheson Street, Healdsburg, CA 95448-4908.

Placer County Air Pollution Control District, 110 Maple Street, Auburn, CA 95603.

Sacramento Metropolitan Air Quality Management District, 777 12th Street, Suite 300, Sacramento, CA 95814-1908.

San Diego County Air Pollution Control District, 10124 Old Grove Road, San Diego, CA 92131-1649.

San Joaquin Valley Air Pollution Control District, 1990 E Gettysburg, Fresno, CA 93726.

San Luis Obispo County Air Pollution Control District, 3433 Roberto Court, San Luis Obispo, CA 93401-7126.

Santa Barbara County Air Pollution Control District, 260 North San Antonio Road, Suite A, Santa Barbara, CA 93110-1315.

Shasta County Air Quality Management District, 1855 Placer Street, Suite 101, Redding, CA 96001-1759.

Siskiyou County Air Pollution Control District, 525 So. Foothill Drive, Yreka, CA 96097-3036.

South Coast Air Quality Management District, 21865 Copley Drive, Diamond Bar, CA 91765-4182.

Tehama County Air Pollution Control District, P.O. Box 1169 (1834 Walnut Street), Red Bluff, CA 96080-0038.

Tuolumne County Air Pollution Control District, 2 South Green St., Sonora, CA 95370-4618.

Ventura County Air Pollution Control District, 4567 Telephone Road, 2nd Floor, Ventura, CA 93003-5417.

Yolo-Solano Air Quality Management District, 1947 Galileo Court, Suite 103, Davis, CA 95618.

Note 2 to paragraph (b)(6):

For tables listing the delegation status of agencies in Region IX, see paragraph (d) of this section.

(7) State of Colorado, Department of Public Health and Environment, 4300 Cherry Creek Drive South, Denver, CO 80222-1530.

Note:

For a table listing Region VIII's NSPS delegation status, see paragraph (c) of this section.

(8) State of Connecticut, Compliance Analysis and Coordination Unit, Bureau of Air Management, Department of Energy and Environmental Protection, 79 Elm Street, 5th Floor, Hartford, CT 06106-5127.

(9) State of Delaware, Department of Natural Resources & Environmental Control, 89 Kings Highway, P.O. Box 1401, Dover, Delaware 19903.

(10) District of Columbia, Department of Public Health, Air Quality Division, 51 N Street, NE., Washington, DC 20002.

(11) State of Florida: Florida Department of Environmental Protection, Division of Air Resources Management, 2600 Blair Stone Road, MS 5500, Tallahassee, Florida 32399-2400.

(12) State of Georgia: Georgia Department of Natural Resources, Environmental Protection Division, Air Protection Branch, 4244 International Parkway, Suite 120, Atlanta, Georgia 30354.

(13) Hawaii:

Clean Air Branch, Hawaii Department of Health, 2827 Waimano Home Road, #130 Pearl City, HI 96782.

Note 4 to paragraph (b)(13):

For tables listing the delegation status of agencies in Region IX, see paragraph (d) of this section.

(14) State of Idaho, Department of Health and Welfare, Statehouse, Boise, ID 83701.

(15) State of Illinois: Illinois Environmental Protection Agency, 1021 North Grand Avenue East, Springfield, Illinois 62794.

(16) State of Indiana: Indiana Department of Environmental Management, Office of Air Quality, 100 North Senate Avenue, Indianapolis, Indiana 46204.

(17) State of Iowa: Iowa Department of Natural Resources, Environmental Protection Division, Air Quality Bureau, 7900 Hickman Road, Suite 1, Urbandale, IA 50322.

(18) State of Kansas: Kansas Department of Health and Environment, Bureau of Air and Radiation, 1000 S.W. Jackson, Suite 310, Topeka, KS 66612-1366.

(19) Commonwealth of Kentucky: Kentucky Department for Environmental Protection, Division for Air Quality, 300 Sower Boulevard, 2nd Floor, Frankfort, Kentucky 40601 or local agency, Louisville Metro Air Pollution Control District, 701 W. Ormsby Ave., Suite 303, Louisville, Kentucky 40203.

(20) State of Louisiana: Louisiana Department of Environmental Quality, P.O. Box 4301, Baton Rouge, Louisiana 70821-4301.

Note:

For a list of delegated standards for Louisiana (excluding Indian country), see paragraph (e)(2) of this section.

(21) State of Maine, Maine Department of Environmental Protection, Bureau of Air Quality, 17 State House Station, Augusta, ME 04333-0017.

(22) State of Maryland, Department of the Environment, 1800 Washington Boulevard, Suite 705, Baltimore, Maryland 21230.

(23) Commonwealth of Massachusetts, Massachusetts Department of Environmental Protection, Division of Air and Climate Programs, One Winter Street, Boston, MA 02108.

(24) State of Michigan: Michigan Department of Natural Resources and Environment, Air Quality Division, P.O. Box 30028, Lansing, Michigan 48909.

(25) State of Minnesota: Minnesota Pollution Control Agency, Division of Air Quality, 520 Lafayette Road North, St. Paul, Minnesota 55155.

(26) State of Mississippi: Hand Deliver or Courier: Mississippi Department of Environmental Quality, Office of Pollution Control, Air Division, 515 East Amite Street, Jackson, Mississippi 39201, Mailing Address: Mississippi Department of Environmental Quality, Office of Pollution Control, Air Division, P.O. Box 2261, Jackson, Mississippi 39225.

(27) State of Missouri: Missouri Department of Natural Resources, Division of Environmental Quality, P.O. Box 176, Jefferson City, MO 65102.

(28) State of Montana, Department of Environmental Quality, 1520 E. 6th Ave., PO Box 200901, Helena, MT 59620-0901.

Note:

For a table listing Region VIII's NSPS delegation status, see paragraph (c) of this section.

(29) State of Nebraska, Nebraska Department of Environmental Control, P.O. Box 94877, State House Station, Lincoln, NE 68509.

Lincoln-Lancaster County Health Department, Division of Environmental Health, 2200 St. Mary's Avenue, Lincoln, NE 68502

(30) Nevada:

Nevada Division of Environmental Protection, 901 South Stewart Street, Suite 4001, Carson City, NV 89701-5249.

Clark County Division of Air Quality, 500 S Grand Central Parkway, 1st Floor, P.O. Box 555210, Las Vegas, NV 89155-5210.

Northern Nevada Public Health, Air Quality Management Division, 1001 E 9th Street, Building B, Reno, NV 89512.

Note 7 to paragraph (b)(30):

For tables listing the delegation status of agencies in Region IX, see paragraph (d) of this section.

(31) State of New Hampshire, New Hampshire Department of Environmental Services, Air Resources Division, 29 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095.

(32) State of New Jersey: New Jersey Department of Environmental Protection, Division of Environmental Quality, Enforcement Element, John Fitch Plaza, CN-027, Trenton, NJ 08625.

(1) The following table lists the specific source and pollutant categories that have been delegated to the states in Region II. The (X) symbol is used to indicate each category that has been delegated.

	Subpart	State			
		New Jersey	New York	Puerto Rico	Virgin Islands
D	Fossil-Fuel Fired Steam Generators for Which Construction Commenced After August 17, 1971 (Steam Generators and Lignite Fired Steam Generators)	X	X	X	X
Da	Electric Utility Steam Generating Units for Which Construction Commenced After September 18, 1978	X		X	
Db	Industrial-Commercial-Institutional Steam Generating Units	X	X	X	X

	Subpart	State			
		New Jersey	New York	Puerto Rico	Virgin Islands
E	Incinerators	X	X	X	X
F	Portland Cement Plants	X	X	X	X
G	Nitric Acid Plants	X	X	X	X
H	Sulfuric Acid Plants	X	X	X	X
I	Asphalt Concrete Plants	X	X	X	X
J	Petroleum Refineries—(All Categories)	X	X	X	X
K	Storage Vessels for Petroleum Liquids Constructed After June 11, 1973, and prior to May 19, 1978	X	X	X	X
Ka	Storage Vessels for Petroleum Liquids Constructed After May 18, 1978	X	X	X	
L	Secondary Lead Smelters	X	X	X	X
M	Secondary Brass and Bronze Ingot Production Plants	X	X	X	X
N	Iron and Steel Plants	X	X	X	X
O	Sewage Treatment Plants	X	X	X	X
P	Primary Copper Smelters	X	X	X	X
Q	Primary Zinc Smelters	X	X	X	X
R	Primary Lead Smelters	X	X	X	X
S	Primary Aluminum Reduction Plants	X	X	X	X
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	X	X	X	X
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants	X	X	X	X
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	X	X	X	X
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	X	X	X	X
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate	X	X	X	X
Y	Coal Preparation Plants	X	X	X	X
Z	Ferroalloy Production Facilities	X	X	X	X
AA	Steel Plants: Electric Arc Furnaces	X	X	X	X
AAa	Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels in Steel Plants	X	X	X	
BB	Kraft Pulp Mills	X	X	X	
CC	Glass Manufacturing Plants	X	X	X	

	Subpart	State			
		New Jersey	New York	Puerto Rico	Virgin Islands
DD	Grain Elevators	X	X	X	
EE	Surface Coating of Metal Furniture	X	X	X	
GG	Stationary Gas Turbines	X	X	X	
HH	Lime Plants	X	X	X	
KK	Lead Acid Battery Manufacturing Plants	X	X		
LL	Metallic Mineral Processing Plants	X	X	X	
MM	Automobile and Light-Duty Truck Surface Coating Operations	X	X		
NN	Phosphate Rock Plants	X	X		
PP	Ammonium Sulfate Manufacturing Plants	X	X		
QQ	Graphic Art Industry Publication Rotogravure Printing	X	X	X	X
RR	Pressure Sensitive Tape and Label Surface Coating Operations	X	X	X	
SS	Industrial Surface Coating: Large Appliances	X	X	X	
TT	Metal Coil Surface Coating	X	X	X	
UU	Asphalt Processing and Asphalt Roofing Manufacture	X	X	X	
VV	Equipment Leaks of Volatile Organic Compounds in Synthetic Organic Chemical Manufacturing Industry	X		X	
WW	Beverage Can Surface Coating Industry	X	X	X	
XX	Bulk Gasoline Terminals	X	X	X	
FFF	Flexible Vinyl and Urethane Coating and Printing	X	X	X	
GGG	Equipment Leaks of VOC in Petroleum Refineries	X		X	
HHH	Synthetic Fiber Production Facilities	X		X	
JJJ	Petroleum Dry Cleaners	X	X	X	
KKK	Equipment Leaks of VOC from Onshore Natural Gas Processing Plants				
LLL	Onshore Natural Gas Processing Plants; SO_2 Emissions		X		
OOO	Nonmetallic Mineral Processing Plants		X	X	
PPP	Wool Fiberglass Insulation Manufacturing Plants		X	X	

(33) State of New Mexico: New Mexico Environment Department, P.O. Box 5469, Santa Fe, New Mexico 87502-5469. Note: For a list of delegated standards for New Mexico (excluding Bernalillo County and Indian country), see paragraph (e)(1) of this section.

(34) New York: New York State Department of Environmental Conservation, 50 Wolf Road Albany, New York 12233, attention: Division of Air Resources.

(35) State of North Carolina: North Carolina Department of Environmental Quality, Division of Air Quality, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641 or local agencies, Forsyth County Office of Environmental Assistance and Protection, 201 North Chestnut Street, Winston-Salem, North Carolina 27101-4120; Mecklenburg County Land Use and Environmental Services Agency, Air Quality, 2145 Suttle Avenue, Charlotte, North Carolina 28208; Western North Carolina Regional Air Quality Agency, 125 S. Lexington Ave., Suite 101, Asheville, North Carolina 28801-3661.

(36) State of North Dakota, North Dakota Department of Environmental Quality, 918 East Divide Avenue, Bismarck, ND 58501-1947.

Note:

For a table listing Region VIII's NSPS delegation status, see paragraph (c) of this section.

(37) State of Ohio:

(i) Medina, Summit and Portage Counties; Director, Akron Regional Air Quality Management District, 146 South High Street, Room 904, Akron, OH 44308.

(ii) Stark County; Director, Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

(iii) Butler, Clermont, Hamilton, and Warren Counties; Director, Hamilton County Department of Environmental Services, 250 William Howard Taft Road, Cincinnati, Ohio 45219-2660.

(iv) Cuyahoga County; Commissioner, Cleveland Department of Public Health, Division of Air Quality, 75 Erieview Plaza 2nd Floor, Cleveland, Ohio 44114.

(v) Clark, Darke, Greene, Miami, Montgomery, and Preble Counties; Director, Regional Air Pollution Control Agency, 117 South Main Street, Dayton, Ohio 45422-1280.

(vi) Lucas County and the City of Rossford (in Wood County); Director, City of Toledo, Division of Environmental Services, 348 South Erie Street, Toledo, OH 43604.

(vii) Adams, Brown, Lawrence, and Scioto Counties; Portsmouth Local Air Agency, 605 Washington Street, Third Floor, Portsmouth, OH 45662.

(viii) Allen, Ashland, Auglaize, Crawford, Defiance, Erie, Fulton, Hancock, Hardin, Henry, Huron, Marion, Mercer, Ottawa, Paulding, Putnam, Richland, Sandusky, Seneca, Van Wert Williams, Wood (Except City of Rossford), and Wyandot Counties; Ohio Environmental Protection Agency, Northwest District Office, Air Pollution Control, 347 North Dunbridge Road, Bowling Green, Ohio 43402.

(ix) Ashtabula, Caroll, Colombiana, Holmes, Lorain, and Wayne Counties; Ohio Environmental Protection Agency, Northeast District Office, Air Pollution Unit, 2110 East Aurora Road, Twinsburg, OH 44087.

(x) Athens, Belmont, Coshocton, Gallia, Guemsey, Harrison, Hocking, Jackson, Jefferson, Meigs, Monroe, Morgan, Muskingum, Noble, Perry, Pike, Ross, Tuscarawas, Vinton, and Washington Counties; Ohio Environmental Protection Agency, Southeast District Office, Air Pollution Unit, 2195 Front Street, Logan, OH 43138.

(xi) Champaign, Clinton, Highland, Logan, and Shelby Counties; Ohio Environmental Protection Agency, Southwest District Office, Air Pollution Unit, 401 East Fifth Street, Dayton, Ohio 45402-2911.

(xii) Delaware, Fairfield, Fayette, Franklin, Knox, Licking, Madison, Morrow, Pickaway, and Union Counties; Ohio Environmental Protection Agency, Central District Office, Air Pollution control, 50 West Town Street, Suite 700, Columbus, Ohio 43215.

(xiii) Geauga and Lake Counties; Lake County General Health District, Air Pollution Control, 33 Mill Street, Painesville, OH 44077.

(xiv) Mahoning and Trumbull Counties; Mahoning-Trumbull Air Pollution Control Agency, 345 Oak Hill Avenue, Suite 200, Youngstown, OH 44502.

(38) State of Oklahoma, Oklahoma State Department of Health, Air Quality Service, P.O. Box 53551, Oklahoma City, OK 73152.

(i) Oklahoma City and County: Director, Oklahoma City-County Health Department, 921 Northeast 23rd Street, Oklahoma City, OK 73105.

(ii) Tulsa County: Tulsa City-County Health Department, 4616 East Fifteenth Street, Tulsa, OK 74112.

(39) State of Oregon.

(i) Oregon Department of Environmental Quality (ODEQ), 811 SW Sixth Avenue, Portland, OR 97204-1390, *http://www.deq.state.or.us.*

(ii) Lane Regional Air Pollution Authority (LRAPA), 1010 Main Street, Springfield, Oregon 97477, *http://www.lrapa.org.*

(40)

(i) City of Philadelphia, Department of Public Health, Air Management Services, 321 University Avenue, Philadelphia, Pennsylvania 19104.

(ii) Commonwealth of Pennsylvania, Department of Environmental Protection, Bureau of Air Quality Control, P.O. Box 8468, 400 Market Street, Harrisburg, Pennsylvania 17105.

(iii) Allegheny County Health Department, Bureau of Environmental Quality, Division of Air Quality, 301 39th Street, Pittsburgh, Pennsylvania 15201.

(41) State of Rhode Island, Rhode Island Department of Environmental Management, Office of Air Resources, 235 Promenade Street, Providence, RI 02908.

(42) State of South Carolina: South Carolina Department of Health and Environmental Control, 2600 Bull Street, Columbia, South Carolina 29201.

(43) State of South Dakota, Air Quality Program, Department of Agriculture and Natural Resources, Joe Foss Building, 523 East Capitol, Pierre, SD 57501-3181.

(44) State of Tennessee: Tennessee Department of Environment and Conservation, Division of Air Pollution Control, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 15th Floor, Nashville, Tennessee 37243, or local agencies, Knox County Air Quality Management—Department of Public Health, 140 Dameron Avenue, Knoxville, Tennessee 37917; Metro Public Health Department, Pollution Control Division, 2500 Charlotte Ave., Nashville, Tennessee 37209; Chattanooga-Hamilton County Air Pollution Control Bureau, 6125 Preservation Drive, Chattanooga, Tennessee 37416; Shelby County Health Department, Pollution Control Section, 814 Jefferson Avenue, Memphis, Tennessee 38105.

(45) State of Texas, Texas Air Control Board, 6330 Highway 290 East, Austin, TX 78723.

(46) State of Utah, Division of Air Quality, Department of Environmental Quality, P.O. Box 144820, Salt Lake City, UT 84114-4820.

Note:

For a table listing Region VIII's NSPS delegation status, see paragraph (c) of this section.

(47) State of Vermont, Agency of Natural Resources, Department of Environmental Conservation, Air Quality and Climate Division, Davis 2, One National Life Drive, Montpelier, VT 05620-3802.

(48) Commonwealth of Virginia, Department of Environmental Quality, 629 East Main Street, Richmond, Virginia 23219.

(49) *State of Washington.*

(i) Washington State Department of Ecology (Ecology), P.O. Box 47600, Olympia, WA 98504-7600, *http://www.ecy.wa.gov/*

(ii) Benton Clean Air Authority (BCAA), 650 George Washington Way, Richland, WA 99352-4289, *http://www.bcaa.net/*

(iii) Northwest Air Pollution Control Authority (NWAPA), 1600 South Second St., Mount Vernon, WA 98273-5202, *http://www.nwair.org/*

(iv) Olympic Regional Clean Air Agency (ORCAA), 909 Sleater-Kinney Road S.E., Suite 1, Lacey, WA 98503-1128, *http://www.orcaa.org/*

(v) Puget Sound Clean Air Agency (PSCAA), 110 Union Street, Suite 500, Seattle, WA 98101-2038, *http://www.pscleanair.org/*

(vi) Spokane County Air Pollution Control Authority (SCAPCA), West 1101 College, Suite 403, Spokane, WA 99201, *http://www.scapca.org/*

(vii) Southwest Clean Air Agency (SWCAA), 1308 NE. 134th St., Vancouver, WA 98685-2747, *http://www.swcleanair.org/*

(viii) Yakima Regional Clean Air Authority (YRCAA), 6 South 2nd Street, Suite 1016, Yakima, WA 98901, *http://co.yakima.wa.us/cleanair/default.htm*

(ix) The following table lists the delegation status of the New Source Performance Standards for the State of Washington. An “X” indicates the subpart has been delegated, subject to all the conditions and limitations set forth in Federal law and the letters granting delegation. Some authorities cannot be delegated and are retained by EPA. Refer to the letters granting delegation for a discussion of these retained authorities. The dates noted at the end of the table indicate the effective dates of Federal rules that have been delegated. Authority for implementing and enforcing any amendments made to these rules after these effective dates are not delegated.

NSPS Subparts Delegated to Washington Air Agencies

Subpart[1]	Washington							
	Ecology[2]	BCAA[3]	NWAPA[4]	ORCAA[5]	PSCAA[6]	SCAPCA[7]	SWCAA[8]	YRCAA[9]
A General Provisions	X	X	X	X	X	X	X	X
B Adoption and Submittal of State Plans for Designated Facilities								
C Emission Guidelines and Compliance Times								
Cb Large Municipal Waste Combustors that are Constructed on or before September 20, 1994 (Emission Guidelines and Compliance Times)								

NSPS Subparts Delegated to Washington Air Agencies								
Subpart[1]	Washington							
	Ecology[2]	BCAA[3]	NWAPA[4]	ORCAA[5]	PSCAA[6]	SCAPCA[7]	SWCAA[8]	YRCAA[9]
Cc Municipal Solid Waste Landfills (Emission Guidelines and Compliance Times)								
Cd Sulfuric Acid Production Units (Emission Guidelines and Compliance Times)								
Ce Hospital/Medical/Infectious Waste Incinerators (Emission Guidelines and Compliance Times)								
D Fossil-Fuel-Fired Steam Generators for which Construction is Commenced after August 17, 1971	X	X	X	X	X	X	X	X
Da Electric Utility Steam Generating Units for which Construction is Commenced after September 18, 1978	X	X	X	X	X	X	X	X
Db Industrial-Commercial-Institutional Steam Generating Units	X	X	X	X	X	X	X	X
Dc Small Industrial-Commercial-Institutional Steam Generating Units	X	X	X	X	X	X	X	X
E Incinerators	X	X	X	X	X	X	X	X
Ea Municipal Waste Combustors for which Construction is Commenced after December 20, 1989 and on or before September 20, 1994	X	X	X	X	X	X	X	X
Eb—Large Municipal Waste Combustors		X		X	X	X		
Ec—Hospital/Medical/Infectious Waste Incinerators	X	X	X	X	X	X		
F Portland Cement Plants	X	X	X	X	X	X	X	X
G Nitric Acid Plants	X	X	X	X	X	X	X	X
H Sulfuric Acid Plants	X	X	X	X	X	X	X	X
I Hot Mix Asphalt Facilities	X	X	X	X	X	X	X	X
J Petroleum Refineries	X	X	X	X	X	X	X	X
K Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced after June 11, 1973 and prior to May 19, 1978	X	X	X	X	X	X	X	X
Ka Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced after May 18, 1978 and prior to July 23, 1984	X	X	X	X	X	X	X	X
Kb VOC Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction,	X	X	X	X	X	X	X	X

NSPS Subparts Delegated to Washington Air Agencies								
Subpart[1]	Washington							
	Ecology[2]	BCAA[3]	NWAPA[4]	ORCAA[5]	PSCAA[6]	SCAPCA[7]	SWCAA[8]	YRCAA[9]
or Modification Commenced after July 23, 1984								
L Secondary Lead Smelters	X	X	X	X	X	X	X	X
M Secondary Brass and Bronze Production Plants	X	X	X	X	X	X	X	X
N Primary Emissions from Basic Oxygen Process Furnaces for which Construction is Commenced after June 11, 1973	X	X	X	X	X	X	X	X
Na Secondary Emissions from Basic Oxygen Process Steel-making Facilities for which Construction is Commenced after January 20, 1983	X	X	X	X	X	X	X	X
O Sewage Treatment Plants	X	X	X	X	X	X	X	X
P Primary Copper Smelters	X	X	X	X	X	X	X	X
Q Primary Zinc Smelters	X	X	X	X	X	X	X	X
R Primary Lead Smelters	X	X	X	X	X	X	X	X
S Primary Aluminum Reduction Plants[10]	X							
T Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	X	X	X	X	X	X	X	X
U Phosphate Fertilizer Industry: Superphosphoric Acid Plants	X	X	X	X	X	X	X	X
V Phosphate Fertilizer Industry: Diammonium Phosphate Plants	X	X	X	X	X	X	X	X
W Phosphate Fertilizer Industry: Triple Superphosphate Plants	X	X	X	X	X	X	X	X
X Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	X	X	X	X	X	X	X	X
Y Coal Preparation Plants	X	X	X	X	X	X	X	X
Z Ferroalloy Production Facilities	X	X	X	X	X	X	X	X
AA Steel Plants: Electric Arc Furnaces Constructed after October 21, 1974 and on or before August 17, 1983	X	X	X	X	X	X	X	X
AAa Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed after August 7, 1983	X	X	X	X	X	X	X	X
BB Kraft Pulp Mills[11]	X							
CC Glass Manufacturing Plants	X	X	X	X	X	X	X	X
DD Grain Elevators	X	X	X	X	X	X	X	X

NSPS Subparts Delegated to Washington Air Agencies								
Subpart[1]	Washington							
	Ecology[2]	BCAA[3]	NWAPA[4]	ORCAA[5]	PSCAA[6]	SCAPCA[7]	SWCAA[8]	YRCAA[9]
EE Surface Coating of Metal Furniture	X	X	X	X	X	X	X	X
GG Stationary Gas Turbines	X	X	X	X	X	X	X	X
HH Lime Manufacturing Plants	X	X	X	X	X	X	X	X
KK Lead-Acid Battery Manufacturing Plants	X	X	X	X	X	X	X	X
LL Metallic Mineral Processing Plants	X	X	X	X	X	X	X	X
MM Automobile and Light Duty Truck Surface Coating Operations	X	X	X	X	X	X	X	X
NN Phosphate Rock Plants	X	X	X	X	X	X	X	X
PP Ammonium Sulfate Manufacture	X	X	X	X	X	X	X	X
QQ Graphic Arts Industry: Publication Rotogravure Printing	X	X	X	X	X	X	X	X
RR Pressure Sensitive Tape and Label Surface Coating Standards	X	X	X	X	X	X	X	X
SS Industrial Surface Coating: Large Appliances	X	X	X	X	X	X	X	X
TT Metal Coil Surface Coating	X	X	X	X	X	X	X	X
UU Asphalt Processing and Asphalt Roof Manufacture	X	X	X	X	X	X	X	X
VV Equipment Leaks of VOC in Synthetic Organic Chemical Manufacturing Industry	X	X	X	X	X	X	X	X
WW Beverage Can Surface Coating Industry	X	X	X	X	X	X	X	X
XX Bulk Gasoline Terminals	X	X	X	X	X	X	X	X
AAA New Residential Wood Heaters								
BBB Rubber Tire Manufacturing Industry	X	X	X	X	X	X	X	X
DDD VOC Emissions from Polymer Manufacturing Industry	X	X	X	X	X	X	X	X
FFF Flexible Vinyl and Urethane Coating and Printing	X	X	X	X	X	X	X	X
GGG Equipment Leaks of VOC in Petroleum Refineries	X	X	X	X	X	X	X	X
HHH Synthetic Fiber Production Facilities	X	X	X	X	X	X	X	X
III VOC Emissions from Synthetic Organic Chemical Manufacturing Industry Air Oxidation Unit Processes	X	X	X	X	X	X	X	X
JJJ Petroleum Dry Cleaners	X	X	X	X	X	X	X	X

NSPS Subparts Delegated to Washington Air Agencies								
Subpart[1]	Washington							
	Ecology[2]	BCAA[3]	NWAPA[4]	ORCAA[5]	PSCAA[6]	SCAPCA[7]	SWCAA[8]	YRCAA[9]
KKK Equipment Leaks of VOC from Onshore Natural Gas Processing Plants	X	X	X	X	X	X	X	X
LLL Onshore Natural Gas Processing: SO_2 Emissions	X	X	X	X	X	X	X	X
NNN VOC Emissions from Synthetic Organic Chemical Manufacturing Industry Distillation Operations	X	X	X	X	X	X	X	X
OOO Nonmetallic Mineral Processing Plants			X		X		X	
PPP Wool Fiberglass Insulation Manufacturing Plants	X	X	X	X	X	X	X	X
QQQ VOC Emissions from Petroleum Refinery Wastewater Systems	X	X	X	X	X	X	X	X
RRR VOCs from Synthetic Organic Chemical Manufacturing Industry Reactor Processes	X	X	X	X	X	X	X	X
SSS Magnetic Tape Coating Facilities	X	X	X	X	X	X	X	X
TTT Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines	X	X	X	X	X	X	X	X
UUU Calciners and Dryers in Mineral Industries	X	X	X	X	X	X	X	X
VVV Polymeric Coating of Supporting Substrates Facilities	X	X	X	X	X	X	X	X
WWW Municipal Solid Waste Landfills	X	X	X	X	X	X	X	X
AAAA Small Municipal Waste Combustion Units for which Construction is Commenced after August 30, 1999 or for which Modification or Reconstruction is Commenced after June 6, 2001	X	X		X	X	X		X
BBBB Small Municipal Waste Combustion Units Constructed on or before August 30, 1999 (Emission Guidelines and Compliance Times)								
CCCC Commercial and Industrial Solid Waste Incineration Units for which Construction is Commenced after November, 30, 1999 or for which Modification or Reconstruction is Commenced on or after June 1, 2001	X	X		X	X	X		X
DDDD Commercial and Industrial Solid Waste Incineration Units that Commenced Construction on or before November 30, 1999 (Emission Guidelines and Compliance Times)								

[1] Any authority within any subpart of this part that is not delegable, is not delegated. Please refer to Attachment B to the delegation letters for a listing of the NSPS authorities excluded from delegation.

[2] Washington State Department of Ecology, for 40 CFR 60.17(h)(1), (h)(2), (h)(3) and 40 CFR part 60, subpart AAAA, as in effect

NSPS Subparts Delegated to Washington Air Agencies								
Subpart[1]	Washington							
	Ecology[2]	BCAA[3]	NWAPA[4]	ORCAA[5]	PSCAA[6]	SCAPCA[7]	SWCAA[8]	YRCAA[9]

on June 6, 2001; for 40 CFR part 60, subpart CCCC, as in effect on June 1, 2001; and for all other NSPS delegated, as in effect February 20, 2001.

[3] Benton Clean Air Authority, for 40 CFR 60.17(h)(1), (h)(2), (h)(3) and 40 CFR part 60, subpart AAAA, as in effect on June 6, 2001; for 40 CFR part 60, subpart CCCC, as in effect on June 1, 2001; and for all other NSPS delegated, as in effect February 20, 2001.

[4] Northwest Air Pollution Authority, for all NSPS delegated, as in effect on July 1, 2000.

[5] Olympic Regional Clean Air Authority, for 40 CFR 60.17(h)(1), (h)(2), (h)(3) and 40 CFR part 60, subpart AAAA, as in effect on June 6, 2001; for 40 CFR part 60, subpart CCCC, as in effect on June 1, 2001; and for all other NSPS delegated, as in effect February 20, 2001.

[6] Puget Sound Clean Air Authority, for all NSPS delegated, as in effect on July 1, 2002.

[7] Spokane County Air Pollution Control Authority, for 40 CFR 60.17(h)(1), (h)(2), (h)(3) and 40 CFR part 60, subpart AAAA, as in effect on June 6, 2001; for 40 CFR part 60, subpart CCCC, as in effect on June 1, 2001; and for all other NSPS delegated, as in effect February 20, 2001.

[8] Southwest Clean Air Agency, for all NSPS delegated, as in effect on July 1, 2000.

[9] Yakima Regional Clean Air Authority, for 40 CFR 60.17(h)(1), (h)(2), (h)(3) and 40 CFR part 60, subpart AAAA, as in effect on June 6, 2001; for 40 CFR part 60, subpart CCCC, as in effect on June 1, 2001; and for all other NSPS delegated, as in effect February 20, 2001.

[10] Subpart S of this part is not delegated to local agencies in Washington because the Washington State Department of Ecology retains sole authority to regulate Primary Aluminum Plants, pursuant to Washington Administrative Code 173-415-010.

[11] Subpart BB of this part is not delegated to local agencies in Washington because the Washington State Department of Ecology retains sole authority to regulate Kraft and Sulfite Pulping Mills, pursuant to Washington State Administrative Code 173-405-012 and 173-410-012.

(50) State of West Virginia, Department of Environmental Protection, Division of Air Quality, 601 57th Street, SE., Charleston, West Virginia 25304.

(51) State of Wisconsin: Wisconsin Department of Natural Resources, 101 South Webster St., P.O. Box 7921, Madison, Wisconsin 53707-7921.

(52) State of Wyoming, Department of Environmental Quality, Air Quality Division, Herschler Building, 122 West 25th Street, Cheyenne, WY 82002.

Note:

For a table listing Region VIII's NSPS delegation status, see paragraph (c) of this section.

(53) Territory of Guam: Guam Environmental Protection Agency, P.O. Box 22439 GMF, Barrigada, Guam 96921.

Note:

For tables listing the delegation status of agencies in Region IX, see paragraph (d) of this section.

(54) Commonwealth of Puerto Rico: Commonwealth of Puerto Rico Environmental Quality Board, P.O. Box 11488, Santurce, PR 00910, Attention: Air Quality Area Director (see table under § 60.4(b)(FF)(1)).

(55) U.S. Virgin Islands: U.S. Virgin Islands Department of Conservation and Cultural Affairs, P.O. Box 578, Charlotte Amalie, St. Thomas, VI 00801.

(56) American Samoa: American Samoa Environmental Protection Agency, P.O. Box PPA, Pago Pago, American Samoa 96799.

Note:

For tables listing the delegation status of agencies in Region IX, see paragraph (d) of this section.

(57) Commonwealth of the Northern Mariana Islands: CNMI Division of Environmental Quality, P.O. Box 501304, Saipan, MP 96950.

Note:

For tables listing the delegation status of agencies in Region IX, see paragraph (d) of this section.

(c) The delegation status table for New Source Performance Standards for Region VIII can be found online at *http://www2.epa.gov/region8/air-program.*

(d) The following tables list the specific part 60 standards that have been delegated unchanged to the air pollution control agencies in Region IX. The (X) symbol is used to indicate each standard that has been delegated. The following provisions of this subpart are not delegated: §§ 60.4(b), 60.8(b), 60.9, 60.11(b), 60.11(e), 60.13(a), 60.13(d)(2), 60.13(g), 60.13(i).

(1) *Arizona.* The following table identifies delegations for Arizona:

Table 3 to Paragraph (d)(1)—Delegation Status for New Source Performance Standards for Arizona

	Subpart	Air pollution control agency			
		Arizona DEQ	Maricopa County	Pima County	Pinal County
A	General Provisions	X	X	X	X
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971	X	X	X	X
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978	X	X	X	X
Db	Industrial-Commercial-Institutional Steam Generating Units	X	X	X	X
Dc	Small Industrial-Commercial-Institutional Steam Generating Units	X	X	X	X
E	Incinerators	X	X	X	X
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994	X	X	X	X
Eb	Large Municipal Waste Combustors Constructed After September 20, 1994	X	X	X	
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996	X	X	X	
F	Portland Cement Plants	X		X	X
G	Nitric Acid Plants	X	X	X	X

Table 3 to Paragraph (d)(1)—Delegation Status for New Source Performance Standards for Arizona

	Subpart	Air pollution control agency			
		Arizona DEQ	Maricopa County	Pima County	Pinal County
Ga	Nitric Acid Plants For Which Construction, Reconstruction or Modification Commenced After October 14, 2011		X	X	
H	Sulfuric Acid Plant	X	X	X	X
I	Hot Mix Asphalt Facilities	X	X	X	X
J	Petroleum Refineries	X		X	X
Ja	Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007			X	
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	X	X	X	X
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	X	X	X	X
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	X	X	X	X
L	Secondary Lead Smelters	X		X	X
M	Secondary Brass and Bronze Production Plants	X	X	X	X
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973	X	X	X	X
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983	X	X	X	X
O	Sewage Treatment Plants	X	X	X	X
P	Primary Copper Smelters	X		X	X
Q	Primary Zinc Smelters	X		X	X
R	Primary Lead Smelters	X		X	X
S	Primary Aluminum Reduction Plants	X	X	X	X
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	X	X	X	X
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants	X	X	X	X
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	X	X	X	X
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	X	X	X	X
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	X	X	X	X

Table 3 to Paragraph (d)(1)—Delegation Status for New Source Performance Standards for Arizona

	Subpart	Air pollution control agency			
		Arizona DEQ	Maricopa County	Pima County	Pinal County
Y	Coal Preparation and Processing Plants	X	X	X	X
Z	Ferroalloy Production Facilities	X	X	X	X
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983	X	X	X	X
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983	X	X	X	X
BB	Kraft Pulp Mills	X	X	X	X
BBa	Kraft Pulp Mill Sources for which Construction, Reconstruction or Modification Commenced after May 23, 2013		X	X	
CC	Glass Manufacturing Plants	X	X	X	X
DD	Grain Elevators	X	X	X	X
EE	Surface Coating of Metal Furniture	X	X	X	X
FF	(Reserved)				
GG	Stationary Gas Turbines	X	X	X	X
HH	Lime Manufacturing Plants	X	X	X	X
KK	Lead-Acid Battery Manufacturing Plants	X	X	X	X
LL	Metallic Mineral Processing Plants	X	X	X	X
MM	Automobile and Light Duty Trucks Surface Coating Operations	X	X	X	X
NN	Phosphate Rock Plants	X	X	X	X
PP	Ammonium Sulfate Manufacture	X	X	X	X
QQ	Graphic Arts Industry: Publication Rotogravure Printing	X	X	X	X
RR	Pressure Sensitive Tape and Label Surface Coating Operations	X	X	X	X
SS	Industrial Surface Coating: Large Appliances	X	X	X	X
TT	Metal Coil Surface Coating	X	X	X	X
UU	Asphalt Processing and Asphalt Roofing Manufacture	X	X	X	X
VV	Equipment Leaks of VOC in the Synthetic Organic Industry Chemicals Manufacturing	X	X	X	X
VVa	Equipment Leaks of VOC in the Synthetic Organic Industry for Which Construction, Reconstruction, or Chemicals Manufacturing Modification Commenced After November 7, 2006	X	X	X	

Table 3 to Paragraph (d)(1)—Delegation Status for New Source Performance Standards for Arizona

	Subpart	Air pollution control agency			
		Arizona DEQ	Maricopa County	Pima County	Pinal County
WW	Beverage Can Surface Coating Industry	X	X	X	X
XX	Bulk Gasoline Terminals	X	X	X	X
AAA	New Residential Wood Heaters	X	X	X	X
BBB	Rubber Tire Manufacturing Industry	X	X	X	X
CCC	(Reserved)				
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry	X	X	X	X
EEE	(Reserved)				
FFF	Flexible Vinyl and Urethane Coating and Printing	X	X	X	X
GGG	Equipment Leaks of VOC in Petroleum Refineries	X		X	X
GGGa	Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006	X		X	
HHH	Synthetic Fiber Production Facilities	X	X	X	X
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes	X	X	X	X
JJJ	Petroleum Dry Cleaners	X	X	X	X
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants	X	X	X	X
LLL	Onshore Natural Gas Processing: SO_2 Emissions	X	X	X	X
MMM	(Reserved)				
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations	X	X	X	X
OOO	Nonmetallic Mineral Processing Plants	X	X	X	X
PPP	Wool Fiberglass Insulation Manufacturing Plants	X	X	X	X
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems	X		X	X
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes	X	X	X	
SSS	Magnetic Tape Coating Facilities	X	X	X	X
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines	X	X	X	X
UUU	Calciners and Dryers in Mineral Industries	X	X	X	

Table 3 to Paragraph (d)(1)—Delegation Status for New Source Performance Standards for Arizona

	Subpart	Air pollution control agency			
		Arizona DEQ	Maricopa County	Pima County	Pinal County
VVV	Polymeric Coating of Supporting Substrates Facilities	X	X	X	X
WWW	Municipal Solid Waste Landfills	X	X	X	
XXX	Municipal Solid Waste Landfills that Commenced Construction, Reconstruction, or Modification After July 17, 2014		X	X	
AAAA	Small Municipal Waste Combustion Units for Which Construction is Commenced After August 30, 1999 or for Which Modification or Reconstruction is Commended After June 6, 2001	X	X	X	
CCCC	Commercial and Industrial Solid Waste Incineration Units for Which Construction Is Commenced After November 30, 1999 or for Which Modification or Reconstruction Is Commenced on or After June 1, 2001	X	X	X	
EEEE	Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006	X	X	X	
GGGG	(Reserved)				
HHHH	(Reserved)				
IIII	Stationary Compression Ignition Internal Combustion Engines	X	X	X	
JJJJ	Stationary Spark Ignition Internal Combustion Engines		X	X	
KKKK	Stationary Combustion Turbines	X	X	X	
LLLL	New Sewage Sludge Incineration Units			X	
MMMM	Emissions Guidelines and Compliance Times for Existing Sewage Sludge Incineration Units	X			
OOOO	Crude Oil and Natural Gas Production, Transmission, and Distribution		X	X	
OOOOa	Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After September 18, 2015		X	X	
QQQQ	Standards of Performance for New Residential Hydronic Heaters and Forced-Air Furnaces		X	X	
TTTT	Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units		X	X	

(2) *California.* The following tables identify delegations for each of the local air pollution control agencies of California.

(i) Delegations for Amador County Air Pollution Control District, Antelope Valley Air Quality Management District, Bay Area Air Quality Management District, and Butte County Air Quality Management District are shown in the following table:

Table 4 to Paragraph (d)(2)(i)—Delegation Status for New Source Performance Standards for Amador County APCD, Antelope Valley AQMD, Bay Area AQMD, and Butte County AQMD

	Subpart	Air pollution control agency			
		Amador County APCD	Antelope Valley AQMD	Bay Area AQMD	Butte County AQMD
A	General Provisions		X		
Ba	Adoption and Submittal of State Plans for Designated Facilities		X		
Cf	Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills		X		
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971		X	X	
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978		X	X	
Db	Industrial-Commercial-Institutional Steam Generating Units		X	X	
Dc	Small Industrial-Commercial-Institutional Steam Generating Units		X	X	
E	Incinerators		X	X	
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994		X	X	
Eb	Large Municipal Waste Combustors Constructed After September 20, 1994		X		
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996		X		
F	Portland Cement Plants		X	X	
G	Nitric Acid Plants		X	X	
Ga	Nitric Acid Plants For Which Construction, Reconstruction or Modification Commenced After October 14, 2011		X		
H	Sulfuric Acid Plant		X	X	
I	Hot Mix Asphalt Facilities		X	X	
J	Petroleum Refineries		X	X	
Ja	Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007		X		
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978		X	X	
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984		X	X	

Table 4 to Paragraph (d)(2)(i)—Delegation Status for New Source Performance Standards for Amador County APCD, Antelope Valley AQMD, Bay Area AQMD, and Butte County AQMD

	Subpart	Air pollution control agency			
		Amador County APCD	Antelope Valley AQMD	Bay Area AQMD	Butte County AQMD
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984		X	X	
L	Secondary Lead Smelters		X	X	
M	Secondary Brass and Bronze Production Plants		X	X	
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973		X	X	
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983		X	X	
O	Sewage Treatment Plants		X	X	
P	Primary Copper Smelters		X	X	
Q	Primary Zinc Smelters		X	X	
R	Primary Lead Smelters		X	X	
S	Primary Aluminum Reduction Plants		X	X	
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants		X		
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants		X	X	
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants		X	X	
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants		X	X	
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities		X	X	
Y	Coal Preparation and Processing Plants		X	X	
Z	Ferroalloy Production Facilities		X	X	
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983		X	X	
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983		X	X	
BB	Kraft Pulp Mills		X	X	
BBa	Kraft Pulp Mill Sources for which Construction, Reconstruction or Modification Commenced after May 23, 2013		X		
CC	Glass Manufacturing Plants		X	X	

Table 4 to Paragraph (d)(2)(i)—Delegation Status for New Source Performance Standards for Amador County APCD, Antelope Valley AQMD, Bay Area AQMD, and Butte County AQMD

	Subpart	Air pollution control agency			
		Amador County APCD	Antelope Valley AQMD	Bay Area AQMD	Butte County AQMD
DD	Grain Elevators		X	X	
EE	Surface Coating of Metal Furniture		X	X	
FF	(Reserved)				
GG	Stationary Gas Turbines		X	X	
HH	Lime Manufacturing Plants		X	X	
KK	Lead-Acid Battery Manufacturing Plants		X	X	
LL	Metallic Mineral Processing Plants		X	X	
MM	Automobile and Light Duty Trucks Surface Coating Operations		X	X	
NN	Phosphate Rock Plants		X	X	
PP	Ammonium Sulfate Manufacture		X	X	
QQ	Graphic Arts Industry: Publication Rotogravure Printing		X	X	
RR	Pressure Sensitive Tape and Label Surface Coating Operations		X	X	
SS	Industrial Surface Coating: Large Appliances		X	X	
TT	Metal Coil Surface Coating		X	X	
UU	Asphalt Processing and Asphalt Roofing Manufacture		X	X	
VV	Equipment Leaks of VOC in the Synthetic Organic Industry Chemicals Manufacturing		X	X	
VVa	Equipment Leaks of VOC in the Synthetic Organic Industry for Which Construction, Reconstruction, or Chemicals Manufacturing Modification Commenced After November 7, 2006		X		
WW	Beverage Can Surface Coating Industry		X	X	
XX	Bulk Gasoline Terminals				
AAA	New Residential Wood Heaters		X	X	
BBB	Rubber Tire Manufacturing Industry		X	X	
CCC	(Reserved)				
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry		X	X	
EEE	(Reserved)				

Table 4 to Paragraph (d)(2)(i)—Delegation Status for New Source Performance Standards for Amador County APCD, Antelope Valley AQMD, Bay Area AQMD, and Butte County AQMD

	Subpart	Air pollution control agency			
		Amador County APCD	Antelope Valley AQMD	Bay Area AQMD	Butte County AQMD
FFF	Flexible Vinyl and Urethane Coating and Printing		X	X	
GGG	Equipment Leaks of VOC in Petroleum Refineries		X	X	
GGGa	Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006		X		
HHH	Synthetic Fiber Production Facilities		X	X	
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes		X		
JJJ	Petroleum Dry Cleaners		X	X	
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants		X	X	
LLL	Onshore Natural Gas Processing: SO_2 Emissions		X		
MMM	(Reserved)				
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations		X	X	
OOO	Nonmetallic Mineral Processing Plants		X	X	
PPP	Wool Fiberglass Insulation Manufacturing Plants		X	X	
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems		X		
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes		X		
SSS	Magnetic Tape Coating Facilities		X	X	
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines		X	X	
UUU	Calciners and Dryers in Mineral Industries		X	X	
VVV	Polymeric Coating of Supporting Substrates Facilities		X	X	
WWW	Municipal Solid Waste Landfills		X		
XXX	Municipal Solid Waste Landfills that Commenced Construction, Reconstruction, or Modification After July 17, 2014		X		
AAAA	Small Municipal Waste Combustion Units for Which Construction is Commenced After August 30, 1999 or for Which Modification or Reconstruction is Commended After June 6, 2001		X		
CCCC	Commercial and Industrial Solid Waste Incineration Units for Which Construction Is		X		

Table 4 to Paragraph (d)(2)(i)—Delegation Status for New Source Performance Standards for Amador County APCD, Antelope Valley AQMD, Bay Area AQMD, and Butte County AQMD

	Subpart	Air pollution control agency			
		Amador County APCD	Antelope Valley AQMD	Bay Area AQMD	Butte County AQMD
	Commenced After November 30, 1999 or for Which Modification or Reconstruction Is Commenced on or After June 1, 2001				
DDDD	Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units		X		
EEEE	Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006		X		
GGGG	(Reserved)				
HHHH	(Reserved)				
IIII	Stationary Compression Ignition Internal Combustion Engines		X		
JJJJ	Stationary Spark Ignition Internal Combustion Engines		X		
KKKK	Stationary Combustion Turbines		X		
LLLL	New Sewage Sludge Incineration Units		X		
MMMM	Emissions Guidelines and Compliance Times for Existing Sewage Sludge Incineration Units		X		
OOOO	Crude Oil and Natural Gas Production, Transmission, and Distribution		X		
OOOOa	Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After September 18, 2015		X		
TTTT	Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units		X		
UUUUa	Emission Guidelines for Greenhouse Gas Emissions From Existing Electric Utility Generating Units		X		

(ii) [Reserved]

(iii) Delegations for Glenn County Air Pollution Control District, Great Basin Unified Air Pollution Control District, Imperial County Air Pollution Control District, and Kern County Air Pollution Control District are shown in the following table:

Delegation Status for New Source Performance Standards for Glenn County APCD, Great Basin Unified APCD, Imperial County APCD, and Kern County APCD

	Subpart	Air pollution control agency

		Glenn County APCD	Great Basin Unified APCD	Imperial County APCD	Kern County APCD
A	General Provisions		X		X
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971		X		X
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978		X		X
Db	Industrial-Commercial-Institutional Steam Generating Units		X		X
Dc	Small Industrial Steam Generating Units		X		X
E	Incinerators		X		X
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994		X		
Eb	Municipal Waste Combustors Constructed After September 20, 1994				
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996				
F	Portland Cement Plants		X		X
G	Nitric Acid Plants		X		X
H	Sulfuric Acid Plants		X		
I	Hot Mix Asphalt Facilities		X		X
J	Petroleum Refineries		X		X
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978		X		X
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984		X		X
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984		X		X
L	Secondary Lead Smelters		X		X
M	Secondary Brass and Bronze Production Plants		X		X
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973		X		X
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983		X		X

Delegation Status for New Source Performance Standards for Glenn County APCD, Great Basin Unified APCD, Imperial County APCD, and Kern County APCD

	Subpart	Air pollution control agency			
		Glenn County APCD	Great Basin Unified APCD	Imperial County APCD	Kern County APCD
O	Sewage Treatment Plants		X		X
P	Primary Copper Smelters		X		X
Q	Primary Zinc Smelters		X		X
R	Primary Lead Smelters		X		X
S	Primary Aluminum Reduction Plants		X		X
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants		X		X
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants		X		X
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants		X		X
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants		X		X
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities		X		X
Y	Coal Preparation Plants		X		X
Z	Ferroalloy Production Facilities		X		X
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983		X		X
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983		X		X
BB	Kraft pulp Mills		X		X
CC	Glass Manufacturing Plants		X		X
DD	Grain Elevators		X		X
EE	Surface Coating of Metal Furniture		X		X
FF	(Reserved)				
GG	Stationary Gas Turbines		X		X
HH	Lime Manufacturing Plants		X		X
KK	Lead-Acid Battery Manufacturing Plants		X		X
LL	Metallic Mineral Processing Plants		X		X

Delegation Status for New Source Performance Standards for Glenn County APCD, Great Basin Unified APCD, Imperial County APCD, and Kern County APCD

	Subpart	Air pollution control agency			
		Glenn County APCD	Great Basin Unified APCD	Imperial County APCD	Kern County APCD
MM	Automobile and Light Duty Trucks Surface Coating Operations		X		X
NN	Phosphate Rock Plants		X		X
PP	Ammonium Sulfate Manufacture		X		X
QQ	Graphic Arts Industry: Publication Rotogravure Printing		X		X
RR	Pressure Sensitive Tape and Label Surface Coating Operations		X		X
SS	Industrial Surface Coating: Large Appliances		X		X
TT	Metal Coil Surface Coating		X		X
UU	Asphalt Processing and Asphalt Roofing Manufacture		X		X
VV	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry		X		X
WW	Beverage Can Surface Coating Industry		X		X
XX	Bulk Gasoline Terminals				
AAA	New Residential Wool Heaters		X		X
BBB	Rubber Tire Manufacturing Industry		X		X
CCC	(Reserved)				
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry		X		X
EEE	(Reserved)				
FFF	Flexible Vinyl and Urethane Coating and Printing		X		X
GGG	Equipment Leaks of VOC in Petroleum Refineries		X		X
HHH	Synthetic Fiber Production Facilities		X		X
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes		X		X
JJJ	Petroleum Dry Cleaners		X		X
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants		X		X

Delegation Status for New Source Performance Standards for Glenn County APCD, Great Basin Unified APCD, Imperial County APCD, and Kern County APCD

	Subpart	Air pollution control agency			
		Glenn County APCD	Great Basin Unified APCD	Imperial County APCD	Kern County APCD
LLL	Onshore Natural Gas Processing: SO2 Emissions				X
MMM	(Reserved)				
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations		X		X
OOO	Nonmetallic Mineral Processing Plants		X		X
PPP	Wool Fiberglass Insulation Manufacturing Plants		X		X
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems		X		X
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes				X
SSS	Magnetic Tape Coating Facilities		X		X
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines		X	X	
UUU	Calciners and Dryers in Mineral Industries		X		X
VVV	Polymeric Coating of Supporting Substrates Facilities		X		X
WWW	Municipal Solid Waste Landfills				X

(iv) Delegations for Lake County Air Quality Management District, Lassen County Air Pollution Control District, Mariposa County Air Pollution Control District, and Mendocino County Air Pollution Control District are shown in the following table:

Delegation Status for New Source Performance Standards for Lake County Air Quality Management District, Lassen County Air Pollution Control District, Mariposa County Air Pollution Control District, and Mendocino County Air Pollution Control District

	Subpart	Air pollution control agency			
		Lake County AQMD	Lassen County APCD	Mariposa County AQMD	Mendocino County AQMD
A	General Provisions	X			X
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971	X			X
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978	X			X

Delegation Status for New Source Performance Standards for Lake County Air Quality Management District, Lassen County Air Pollution Control District, Mariposa County Air Pollution Control District, and Mendocino County Air Pollution Control District

	Subpart	Air pollution control agency			
		Lake County AQMD	Lassen County APCD	Mariposa County AQMD	Mendocino County AQMD
Db	Industrial-Commercial-Institutional Steam Generating Units	X			
Dc	Small Industrial Steam Generating Units	X			X
E	Incinerators	X			X
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994	X			X
Eb	Municipal Waste Combustors Constructed After September 20, 1994				
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996				
F	Portland Cement Plants	X			X
G	Nitric Acid Plants	X			X
H	Sulfuric Acid Plants	X			X
I	Hot Mix Asphalt Facilities	X			X
J	Petroleum Refineries	X			X
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	X			X
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	X			X
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	X			X
L	Secondary Lead Smelters	X			X
M	Secondary Brass and Bronze Production Plants	X			X
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973	X			X
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983	X			X

Delegation Status for New Source Performance Standards for Lake County Air Quality Management District, Lassen County Air Pollution Control District, Mariposa County Air Pollution Control District, and Mendocino County Air Pollution Control District

	Subpart	Air pollution control agency			
		Lake County AQMD	Lassen County APCD	Mariposa County AQMD	Mendocino County AQMD
O	Sewage Treatment Plants	X			X
P	Primary Copper Smelters	X			X
Q	Primary Zinc Smelters	X			X
R	Primary Lead Smelters	X			X
S	Primary Aluminum Reduction Plants	X			X
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	X			X
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants	X			X
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	X			X
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	X			X
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	X			X
Y	Coal Preparation Plants	X			X
Z	Ferroalloy Production Facilities	X			X
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983	X			X
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983	X			X
BB	Kraft Pulp Mills	X			X
CC	Glass Manufacturing Plants	X			X
DD	Grain Elevators	X			X
EE	Surface Coating of Metal Furniture	X			X
FF	(Reserved)				
GG	Stationary Gas Turbines	X			X
HH	Lime Manufacturing Plants	X			X
KK	Lead-Acid Battery Manufacturing Plants	X			X
LL	Metallic Mineral Processing Plants	X			X

Delegation Status for New Source Performance Standards for Lake County Air Quality Management District, Lassen County Air Pollution Control District, Mariposa County Air Pollution Control District, and Mendocino County Air Pollution Control District

	Subpart	Air pollution control agency			
		Lake County AQMD	Lassen County APCD	Mariposa County AQMD	Mendocino County AQMD
MM	Automobile and Light Duty Trucks Surface Coating Operations	X			X
NN	Phosphate Rock Plants	X			X
PP	Ammonium Sulfate Manufacture	X			X
QQ	Graphic Arts Industry: Publication Rotogravure Printing	X			X
RR	Pressure Sensitive Tape and Label Surface Coating Operations	X			X
SS	Industrial Surface Coating: Large Appliances	X			X
TT	Metal Coil Surface Coating	X			X
UU	Asphalt Processing and Asphalt Roofing Manufacture	X			X
VV	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry	X			X
WW	Beverage Can Surface Coating Industry	X			X
XX	Bulk Gasoline Terminals				
AAA	New Residential Wool Heaters	X			X
BBB	Rubber Tire Manufacturing Industry	X			X
CCC	(Reserved)				
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry	X			X
EEE	(Reserved)				
FFF	Flexible Vinyl and Urethane Coating and Printing	X			X
GGG	Equipment Leaks of VOC in Petroleum Refineries	X			X
HHH	Synthetic Fiber Production Facilities	X			X
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes	X			X
JJJ	Petroleum Dry Cleaners	X			X
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants	X			X

Delegation Status for New Source Performance Standards for Lake County Air Quality Management District, Lassen County Air Pollution Control District, Mariposa County Air Pollution Control District, and Mendocino County Air Pollution Control District

	Subpart	Air pollution control agency			
		Lake County AQMD	Lassen County APCD	Mariposa County AQMD	Mendocino County AQMD
LLL	Onshore Natural Gas Processing: SO2 Emissions	X			X
MMM	(Reserved)				
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations	X			X
OOO	Nonmetallic Mineral Processing Plants	X			X
PPP	Wool Fiberglass Insulation Manufacturing Plants	X			X
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems	X			X
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes	X			
SSS	Magnetic Tape Coating Facilities	X			X
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines				
UUU	Calciners and Dryers in Mineral Industries	X			X
VVV	Polymeric Coating of Supporting Substrates Facilities	X			X
WWW	Municipal Solid Waste Landfills	X			

(v) Delegations for Modoc Air Pollution Control District, Mojave Desert Air Quality Management District, Monterey Bay Unified Air Pollution Control District and North Coast Unified Air Quality Management District are shown in the following table:

Table 7 to Paragraph (d)(2)(v)—Delegation Status for New Source Performance Standards for Modoc County APCD, Mojave Desert AQMD, Monterey Bay Unified APCD, and North Coast Unified AQMD

	Subpart	Air pollution control agency			
		Modoc County APCD	Mojave Desert AQMD	Monterey Bay Unified APCD	North Coast Unified AQMD
A	General Provisions	X	X	X	X
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971	X	X	X	X
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978	X	X	X	X

Table 7 to Paragraph (d)(2)(v)—Delegation Status for New Source Performance Standards for Modoc County APCD, Mojave Desert AQMD, Monterey Bay Unified APCD, and North Coast Unified AQMD

	Subpart	Air pollution control agency			
		Modoc County APCD	Mojave Desert AQMD	Monterey Bay Unified APCD	North Coast Unified AQMD
Db	Industrial-Commercial-Institutional Steam Generating Units	X	X	X	X
Dc	Small Industrial-Commercial-Institutional Steam Generating Units		X	X	
E	Incinerators	X	X	X	X
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994		X		
Eb	Large Municipal Waste Combustors Constructed After September 20, 1994		X		
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996		X		
F	Portland Cement Plants	X	X	X	X
G	Nitric Acid Plants	X	X	X	X
Ga	Nitric Acid Plants For Which Construction, Reconstruction or Modification Commenced After October 14, 2011				
H	Sulfuric Acid Plant	X	X	X	X
I	Hot Mix Asphalt Facilities	X	X	X	X
J	Petroleum Refineries	X	X	X	X
Ja	Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007		X		
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	X	X	X	X
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	X	X	X	X
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	X	X	X	X
L	Secondary Lead Smelters	X	X	X	X
M	Secondary Brass and Bronze Production Plants	X	X	X	X
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973	X	X	X	X
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which	X	X	X	X

Table 7 to Paragraph (d)(2)(v)—Delegation Status for New Source Performance Standards for Modoc County APCD, Mojave Desert AQMD, Monterey Bay Unified APCD, and North Coast Unified AQMD

	Subpart	Air pollution control agency			
		Modoc County APCD	Mojave Desert AQMD	Monterey Bay Unified APCD	North Coast Unified AQMD
	Construction is Commenced After January 20, 1983				
O	Sewage Treatment Plants	X	X	X	X
P	Primary Copper Smelters	X	X	X	X
Q	Primary Zinc Smelters	X	X	X	X
R	Primary Lead Smelters	X	X	X	X
S	Primary Aluminum Reduction Plants	X	X	X	X
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	X	X	X	X
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants	X	X	X	X
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	X	X	X	X
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	X	X	X	X
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	X	X	X	X
Y	Coal Preparation and Processing Plants	X	X	X	X
Z	Ferroalloy Production Facilities	X	X	X	X
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983	X	X	X	X
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983	X	X	X	X
BB	Kraft Pulp Mills	X	X	X	X
CC	Glass Manufacturing Plants	X	X	X	X
DD	Grain Elevators	X	X	X	X
EE	Surface Coating of Metal Furniture	X	X	X	X
FF	(Reserved)				
GG	Stationary Gas Turbines	X	X	X	X
HH	Lime Manufacturing Plants	X	X	X	X
KK	Lead-Acid Battery Manufacturing Plants	X	X	X	X
LL	Metallic Mineral Processing Plants	X	X	X	X

Table 7 to Paragraph (d)(2)(v)—Delegation Status for New Source Performance Standards for Modoc County APCD, Mojave Desert AQMD, Monterey Bay Unified APCD, and North Coast Unified AQMD

	Subpart	Air pollution control agency			
		Modoc County APCD	Mojave Desert AQMD	Monterey Bay Unified APCD	North Coast Unified AQMD
MM	Automobile and Light Duty Trucks Surface Coating Operations	X	X	X	X
NN	Phosphate Rock Plants	X	X	X	X
PP	Ammonium Sulfate Manufacture	X	X	X	X
QQ	Graphic Arts Industry: Publication Rotogravure Printing	X	X	X	X
RR	Pressure Sensitive Tape and Label Surface Coating Operations	X	X	X	X
SS	Industrial Surface Coating: Large Appliances	X	X	X	X
TT	Metal Coil Surface Coating	X	X	X	X
UU	Asphalt Processing and Asphalt Roofing Manufacture	X	X	X	X
VV	Equipment Leaks of VOC in the Synthetic Organic Industry Chemicals Manufacturing	X	X	X	X
VVa	Equipment Leaks of VOC in the Synthetic Organic Industry for Which Construction, Reconstruction, or Chemicals Manufacturing Modification Commenced After November 7, 2006		X		
WW	Beverage Can Surface Coating Industry	X	X	X	X
XX	Bulk Gasoline Terminals				
AAA	New Residential Wood Heaters	X	X	X	X
BBB	Rubber Tire Manufacturing Industry	X	X	X	X
CCC	(Reserved)				
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry	X	X	X	
EEE	(Reserved)				
FFF	Flexible Vinyl and Urethane Coating and Printing	X	X	X	X
GGG	Equipment Leaks of VOC in Petroleum Refineries	X	X	X	X
GGGa	Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006		X		
HHH	Synthetic Fiber Production Facilities	X	X	X	X
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes		X		

Table 7 to Paragraph (d)(2)(v)—Delegation Status for New Source Performance Standards for Modoc County APCD, Mojave Desert AQMD, Monterey Bay Unified APCD, and North Coast Unified AQMD

	Subpart	Air pollution control agency			
		Modoc County APCD	Mojave Desert AQMD	Monterey Bay Unified APCD	North Coast Unified AQMD
JJJ	Petroleum Dry Cleaners	X	X	X	X
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants	X	X	X	X
LLL	Onshore Natural Gas Processing: SO_2 Emissions	X	X	X	X
MMM	(Reserved)				
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations	X	X	X	
OOO	Nonmetallic Mineral Processing Plants	X	X	X	X
PPP	Wool Fiberglass Insulation Manufacturing Plants	X	X	X	X
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems	X	X	X	X
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes		X		
SSS	Magnetic Tape Coating Facilities	X	X	X	X
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines	X	X	X	X
UUU	Calciners and Dryers in Mineral Industries		X	X	
VVV	Polymeric Coating of Supporting Substrates Facilities		X	X	X
WWW	Municipal Solid Waste Landfills		X	X	
AAAA	Small Municipal Waste Combustion Units for Which Construction is Commenced After August 30, 1999 or for Which Modification or Reconstruction is Commended After June 6, 2001		X		
CCCC	Commercial and Industrial Solid Waste Incineration Units for Which Construction Is Commenced After November 30, 1999 or for Which Modification or Reconstruction Is Commenced on or After June 1, 2001		X		
EEEE	Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006		X		
GGGG	(Reserved)				
HHHH	(Reserved)				
IIII	Stationary Compression Ignition Internal Combustion Engines		X	X	
JJJJ	Stationary Spark Ignition Internal Combustion Engines		X	X	

Table 7 to Paragraph (d)(2)(v)—Delegation Status for New Source Performance Standards for Modoc County APCD, Mojave Desert AQMD, Monterey Bay Unified APCD, and North Coast Unified AQMD

	Subpart	Air pollution control agency			
		Modoc County APCD	Mojave Desert AQMD	Monterey Bay Unified APCD	North Coast Unified AQMD
KKKK	Stationary Combustion Turbines		X	X	
LLLL	New Sewage Sludge Incineration Units				
OOOO	Crude Oil and Natural Gas Production, Transmission, and Distribution				

(vi) Delegations for Northern Sierra Air Quality Management District, Northern Sonoma County Air Pollution Control District, Placer County Air Pollution Control District, and Sacramento Metropolitan Air Quality Management District are shown in the following table:

Delegation Status for New Source Performance Standards for Northern Sierra Air Quality Management District, Northern Sonoma County Air Pollution Control District, Placer County Air Pollution Control District, and Sacramento Metropolitan Air Quality Management District

	Subpart	Air pollution control agency			
		Northern Sierra AQMD	Northern Sonoma County APCD	Placer County APCD	Sacramento Metropolitan AQMD
A	General Provisions		X		X
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971		X		X
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978		X		X
Db	Industrial-Commercial-Institutional Steam Generating Units				X
Dc	Small Industrial Steam Generating Units				X
E	Incinerators		X		X
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994				X
Eb	Municipal Waste Combustors Constructed After September 20, 1994				X
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996				X
F	Portland Cement Plants		X		X
G	Nitric Acid Plants		X		X
H	Sulfuric Acid Plants		X		X

Delegation Status for New Source Performance Standards for Northern Sierra Air Quality Management District, Northern Sonoma County Air Pollution Control District, Placer County Air Pollution Control District, and Sacramento Metropolitan Air Quality Management District

	Subpart	Air pollution control agency			
		Northern Sierra AQMD	Northern Sonoma County APCD	Placer County APCD	Sacramento Metropolitan AQMD
I	Hot Mix Asphalt Facilities		X		X
J	Petroleum Refineries		X		X
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978		X		X
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984		X		X
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984				X
L	Secondary Lead Smelters		X		X
M	Secondary Brass and Bronze Production Plants		X		X
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973		X		X
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983				X
O	Sewage Treatment Plants		X		X
P	Primary Copper Smelters		X		X
Q	Primary Zinc Smelters		X		X
R	Primary Lead Smelters		X		X
S	Primary Aluminum Reduction Plants		X		X
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants		X		X
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants		X		X
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants		X		X
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants		X		X
X	Phosphate Fertilizer Industry: Granular Triple		X		X

Delegation Status for New Source Performance Standards for Northern Sierra Air Quality Management District, Northern Sonoma County Air Pollution Control District, Placer County Air Pollution Control District, and Sacramento Metropolitan Air Quality Management District

	Subpart	Air pollution control agency			
		Northern Sierra AQMD	Northern Sonoma County APCD	Placer County APCD	Sacramento Metropolitan AQMD
	Superphosphate Storage Facilities				
Y	Coal Preparation Plants		X		X
Z	Ferroalloy Production Facilities		X		X
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983		X		X
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983				X
BB	Kraft pulp Mills		X		X
CC	Glass Manufacturing Plants		X		X
DD	Grain Elevators		X		X
EE	Surface Coating of Metal Furniture				X
FF	(Reserved)				
GG	Stationary Gas Turbines		X		X
HH	Lime Manufacturing Plants		X		X
KK	Lead-Acid Battery Manufacturing Plants				X
LL	Metallic Mineral Processing Plants				X
MM	Automobile and Light Duty Trucks Surface Coating Operations		X		X
NN	Phosphate Rock Plants				X
PP	Ammonium Sulfate Manufacture		X		X
QQ	Graphic Arts Industry: Publication Rotogravure Printing				X
RR	Pressure Sensitive Tape and Label Surface Coating Operations				X
SS	Industrial Surface Coating: Large Appliances				X
TT	Metal Coil Surface Coating				X
UU	Asphalt Processing and Asphalt Roofing Manufacture				X
VV	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry				X

Delegation Status for New Source Performance Standards for Northern Sierra Air Quality Management District, Northern Sonoma County Air Pollution Control District, Placer County Air Pollution Control District, and Sacramento Metropolitan Air Quality Management District

	Subpart	Air pollution control agency			
		Northern Sierra AQMD	Northern Sonoma County APCD	Placer County APCD	Sacramento Metropolitan AQMD
WW	Beverage Can Surface Coating Industry				X
XX	Bulk Gasoline Terminals				
AAA	New Residential Wool Heaters				X
BBB	Rubber Tire Manufacturing Industry				X
CCC	(Reserved)				
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry				X
EEE	(Reserved)				
FFF	Flexible Vinyl and Urethane Coating and Printing				X
GGG	Equipment Leaks of VOC in Petroleum Refineries				X
HHH	Synthetic Fiber Production Facilities				X
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes				X
JJJ	Petroleum Dry Cleaners				X
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants				X
LLL	Onshore Natural Gas Processing: SO2 Emissions				X
MMM	(Reserved)				
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations				X
OOO	Nonmetallic Mineral Processing Plants				X
PPP	Wool Fiberglass Insulation Manufacturing Plants				X
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems				X
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes				X

Delegation Status for New Source Performance Standards for Northern Sierra Air Quality Management District, Northern Sonoma County Air Pollution Control District, Placer County Air Pollution Control District, and Sacramento Metropolitan Air Quality Management District

	Subpart	Air pollution control agency			
		Northern Sierra AQMD	Northern Sonoma County APCD	Placer County APCD	Sacramento Metropolitan AQMD
SSS	Magnetic Tape Coating Facilities				X
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines				X
UUU	Calciners and Dryers in Mineral Industries				X
VVV	Polymeric Coating of Supporting Substrates Facilities				X
WWW	Municipal Solid Waste Landfills				X

(vii) Delegations for San Diego County Air Pollution Control District, San Joaquin Valley Unified Air Pollution Control District, San Luis Obispo County Air Pollution Control District, and Santa Barbara County Air Pollution Control District are shown in the following table:

Table 9 to Paragraph (d)(2)(vii)—Delegation Status for New Source Performance Standards for San Diego County APCD, San Joaquin Valley Unified APCD, San Luis Obispo County APCD, and Santa Barbara County APCD

	Subpart	Air pollution control agency			
		San Diego County APCD	San Joaquin Valley Unified APCD	San Luis Obispo County APCD	Santa Barbara County APCD
A	General Provisions	X	X	X	X
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971	X	X	X	X
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978	X	X	X	X
Db	Industrial-Commercial-Institutional Steam Generating Units	X	X	X	X
Dc	Small Industrial-Commercial-Institutional Steam Generating Units	X	X	X	X
E	Incinerators	X	X	X	X
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994	X	X	X	
Eb	Large Municipal Waste Combustors Constructed After September 20, 1994	X	X		X
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996	X			X
F	Portland Cement Plants	X	X	X	

Table 9 to Paragraph (d)(2)(vii)—Delegation Status for New Source Performance Standards for San Diego County APCD, San Joaquin Valley Unified APCD, San Luis Obispo County APCD, and Santa Barbara County APCD

	Subpart	Air pollution control agency			
		San Diego County APCD	San Joaquin Valley Unified APCD	San Luis Obispo County APCD	Santa Barbara County APCD
G	Nitric Acid Plants	X	X	X	
Ga	Nitric Acid Plants For Which Construction, Reconstruction or Modification Commenced After October 14, 2011				
H	Sulfuric Acid Plant	X	X	X	
I	Hot Mix Asphalt Facilities	X	X	X	X
J	Petroleum Refineries	X	X	X	X
Ja	Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007				X
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	X	X	X	X
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	X	X	X	X
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	X	X	X	X
L	Secondary Lead Smelters	X	X	X	X
M	Secondary Brass and Bronze Production Plants	X	X	X	X
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973	X	X	X	
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983	X	X	X	
O	Sewage Treatment Plants	X	X	X	X
P	Primary Copper Smelters	X	X	X	
Q	Primary Zinc Smelters	X	X	X	
R	Primary Lead Smelters	X	X	X	
S	Primary Aluminum Reduction Plants	X	X	X	
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	X	X	X	
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants	X	X	X	
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	X	X	X	

Table 9 to Paragraph (d)(2)(vii)—Delegation Status for New Source Performance Standards for San Diego County APCD, San Joaquin Valley Unified APCD, San Luis Obispo County APCD, and Santa Barbara County APCD

	Subpart	Air pollution control agency			
		San Diego County APCD	San Joaquin Valley Unified APCD	San Luis Obispo County APCD	Santa Barbara County APCD
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	X	X	X	
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	X	X	X	
Y	Coal Preparation and Processing Plants	X	X	X	
Z	Ferroalloy Production Facilities	X	X	X	
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983	X	X	X	
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983	X	X	X	
BB	Kraft Pulp Mills	X	X	X	
CC	Glass Manufacturing Plants	X	X	X	X
DD	Grain Elevators	X	X	X	X
EE	Surface Coating of Metal Furniture	X	X	X	
FF	(Reserved)				
GG	Stationary Gas Turbines	X	X	X	X
HH	Lime Manufacturing Plants	X	X	X	
KK	Lead-Acid Battery Manufacturing Plants	X	X	X	
LL	Metallic Mineral Processing Plants	X	X	X	
MM	Automobile and Light Duty Trucks Surface Coating Operations	X	X	X	
NN	Phosphate Rock Plants	X	X	X	
PP	Ammonium Sulfate Manufacture	X	X	X	
QQ	Graphic Arts Industry: Publication Rotogravure Printing	X	X	X	
RR	Pressure Sensitive Tape and Label Surface Coating Operations	X	X	X	
SS	Industrial Surface Coating: Large Appliances	X	X	X	
TT	Metal Coil Surface Coating	X	X	X	
UU	Asphalt Processing and Asphalt Roofing Manufacture	X	X	X	

Table 9 to Paragraph (d)(2)(vii)—Delegation Status for New Source Performance Standards for San Diego County APCD, San Joaquin Valley Unified APCD, San Luis Obispo County APCD, and Santa Barbara County APCD

	Subpart	Air pollution control agency			
		San Diego County APCD	San Joaquin Valley Unified APCD	San Luis Obispo County APCD	Santa Barbara County APCD
VV	Equipment Leaks of VOC in the Synthetic Organic Industry Chemicals Manufacturing	X	X	X	
VVa	Equipment Leaks of VOC in the Synthetic Organic Industry for Which Construction, Reconstruction, or Chemicals Manufacturing Modification Commenced After November 7, 2006				X
WW	Beverage Can Surface Coating Industry	X	X	X	
XX	Bulk Gasoline Terminals				
AAA	New Residential Wood Heaters	X	X	X	X
BBB	Rubber Tire Manufacturing Industry	X	X	X	
CCC	(Reserved)				
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry	X	X		
EEE	(Reserved)				
FFF	Flexible Vinyl and Urethane Coating and Printing	X	X	X	
GGG	Equipment Leaks of VOC in Petroleum Refineries	X	X	X	
GGGa	Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006				X
HHH	Synthetic Fiber Production Facilities	X	X	X	
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes	X	X		
JJJ	Petroleum Dry Cleaners	X	X	X	
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants	X	X	X	
LLL	Onshore Natural Gas Processing: SO_2 Emissions	X	X	X	
MMM	(Reserved)				
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations	X	X		
OOO	Nonmetallic Mineral Processing Plants	X	X	X	X
PPP	Wool Fiberglass Insulation Manufacturing Plants	X	X	X	

Table 9 to Paragraph (d)(2)(vii)—Delegation Status for New Source Performance Standards for San Diego County APCD, San Joaquin Valley Unified APCD, San Luis Obispo County APCD, and Santa Barbara County APCD

	Subpart	Air pollution control agency			
		San Diego County APCD	San Joaquin Valley Unified APCD	San Luis Obispo County APCD	Santa Barbara County APCD
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems	X	X	X	
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes	X	X	X	
SSS	Magnetic Tape Coating Facilities	X	X	X	
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines	X	X	X	
UUU	Calciners and Dryers in Mineral Industries	X	X	X	X
VVV	Polymeric Coating of Supporting Substrates Facilities	X	X	X	X
WWW	Municipal Solid Waste Landfills	X	X	X	X
AAAA	Small Municipal Waste Combustion Units for Which Construction is Commenced After August 30, 1999 or for Which Modification or Reconstruction is Commended After June 6, 2001	X			X
CCCC	Commercial and Industrial Solid Waste Incineration Units for Which Construction Is Commenced After November 30, 1999 or for Which Modification or Reconstruction Is Commenced on or After June 1, 2001	X			X
EEEE	Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006	X			X
GGGG	(Reserved)				
HHHH	(Reserved)				
IIII	Stationary Compression Ignition Internal Combustion Engines	X			X
JJJJ	Stationary Spark Ignition Internal Combustion Engines	X			X
KKKK	Stationary Combustion Turbines	X			X
LLLL	New Sewage Sludge Incineration Units				
OOOO	Crude Oil and Natural Gas Production, Transmission, and Distribution				
QQQQ	Standards of Performance for New Residential Hydronic Heaters and Forced-Air Furnaces	X			
TTTT	Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units	X			

(viii) Delegations for Shasta County Air Quality Management District, Siskiyou County Air Pollution Control District, South Coast Air Quality Management District, and Tehama County Air Pollution Control District are shown in the following table:

Delegation Status for New Source Performance Standards for Shasta County AQMD, Siskiyou County APCD, South Coast AQMD, and Tehama County APCD

	Subpart	Air pollution control agency			
		Shasta County AQMD	Siskiyou County APCD	South Coast AQMD	Tehama County APCD
A	General Provisions	X	X	X	
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971	X		X	
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978			X	
Db	Industrial-Commercial-Institutional Steam Generating Units			X	
Dc	Small Industrial-Commercial-Institutional Steam Generating Units			X	
E	Incinerators	X		X	
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994			X	
Eb	Large Municipal Waste Combustors Constructed After September 20, 1994			X	
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996			X	
F	Portland Cement Plants	X		X	
G	Nitric Acid Plants	X		X	
Ga	Nitric Acid Plants For Which Construction, Reconstruction or Modification Commenced After October 14, 2011				
H	Sulfuric Acid Plant	X		X	
I	Hot Mix Asphalt Facilities	X		X	
J	Petroleum Refineries	X		X	
Ja	Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007			X	
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	X		X	
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984			X	

Delegation Status for New Source Performance Standards for Shasta County AQMD, Siskiyou County APCD, South Coast AQMD, and Tehama County APCD

	Subpart	Air pollution control agency			
		Shasta County AQMD	Siskiyou County APCD	South Coast AQMD	Tehama County APCD
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984			X	
L	Secondary Lead Smelters	X		X	
M	Secondary Brass and Bronze Production Plants	X		X	
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973	X		X	
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983			X	
O	Sewage Treatment Plants	X		X	
P	Primary Copper Smelters	X		X	
Q	Primary Zinc Smelters	X		X	
R	Primary Lead Smelters	X		X	
S	Primary Aluminum Reduction Plants	X		X	
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	X		X	
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants	X		X	
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	X		X	
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	X		X	
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	X		X	
Y	Coal Preparation and Processing Plants	X		X	
Z	Ferroalloy Production Facilities	X		X	
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983	X		X	
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983			X	
BB	Kraft Pulp Mills	X		X	
CC	Glass Manufacturing Plants			X	
DD	Grain Elevators	X		X	

Delegation Status for New Source Performance Standards for Shasta County AQMD, Siskiyou County APCD, South Coast AQMD, and Tehama County APCD

	Subpart	Air pollution control agency			
		Shasta County AQMD	Siskiyou County APCD	South Coast AQMD	Tehama County APCD
EE	Surface Coating of Metal Furniture			X	
FF	(Reserved)				
GG	Stationary Gas Turbines			X	
HH	Lime Manufacturing Plants	X		X	
KK	Lead-Acid Battery Manufacturing Plants			X	
LL	Metallic Mineral Processing Plants			X	
MM	Automobile and Light Duty Trucks Surface Coating Operations			X	
NN	Phosphate Rock Plants			X	
PP	Ammonium Sulfate Manufacture			X	
QQ	Graphic Arts Industry: Publication Rotogravure Printing			X	
RR	Pressure Sensitive Tape and Label Surface Coating Operations			X	
SS	Industrial Surface Coating: Large Appliances			X	
TT	Metal Coil Surface Coating			X	
UU	Asphalt Processing and Asphalt Roofing Manufacture			X	
VV	Equipment Leaks of VOC in the Synthetic Organic Industry Chemicals Manufacturing			X	
VVa	Equipment Leaks of VOC in the Synthetic Organic Industry for Which Construction, Reconstruction, or Chemicals Manufacturing Modification Commenced After November 7, 2006			X	
WW	Beverage Can Surface Coating Industry			X	
XX	Bulk Gasoline Terminals				
AAA	New Residential Wood Heaters		X	X	
BBB	Rubber Tire Manufacturing Industry		X	X	
CCC	(Reserved)				
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry			X	
EEE	(Reserved)				

Delegation Status for New Source Performance Standards for Shasta County AQMD, Siskiyou County APCD, South Coast AQMD, and Tehama County APCD

	Subpart	Air pollution control agency			
		Shasta County AQMD	Siskiyou County APCD	South Coast AQMD	Tehama County APCD
FFF	Flexible Vinyl and Urethane Coating and Printing			X	
GGG	Equipment Leaks of VOC in Petroleum Refineries			X	
GGGa	Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006			X	
HHH	Synthetic Fiber Production Facilities			X	
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes			X	
JJJ	Petroleum Dry Cleaners			X	
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants			X	
LLL	Onshore Natural Gas Processing: SO_2 Emissions			X	
MMM	(Reserved)				
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations			X	
OOO	Nonmetallic Mineral Processing Plants			X	
PPP	Wool Fiberglass Insulation Manufacturing Plants			X	
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems		X	X	
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes			X	
SSS	Magnetic Tape Coating Facilities		X	X	
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines		X	X	
UUU	Calciners and Dryers in Mineral Industries			X	
VVV	Polymeric Coating of Supporting Substrates Facilities			X	
WWW	Municipal Solid Waste Landfills			X	
AAAA	Small Municipal Waste Combustion Units for Which Construction is Commenced After August 30, 1999 or for Which Modification or Reconstruction is Commended After June 6, 2001	X	X	X	
CCCC	Commercial and Industrial Solid Waste Incineration Units for Which Construction Is Commenced After November 30, 1999 or for Which Modification or Reconstruction Is Commenced on or After June 1, 2001			X	

Delegation Status for New Source Performance Standards for Shasta County AQMD, Siskiyou County APCD, South Coast AQMD, and Tehama County APCD

	Subpart	Air pollution control agency			
		Shasta County AQMD	Siskiyou County APCD	South Coast AQMD	Tehama County APCD
EEEE	Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006			X	
GGGG	(Reserved)				
HHHH	(Reserved)				
IIII	Stationary Compression Ignition Internal Combustion Engines			X	
JJJJ	Stationary Spark Ignition Internal Combustion Engines			X	
KKKK	Stationary Combustion Turbines			X	
LLLL	New Sewage Sludge Incineration Units				
OOOO	Crude Oil and Natural Gas Production, Transmission, and Distribution				

(ix) Delegations for Tuolumne County Air Pollution Control District, Ventura County Air Pollution Control District, and Yolo-Solano Air Quality Management District are shown in the following table:

Table 11 to Paragraph (d)(2)(ix)—Delegation Status for New Source Performance Standards for Tuolumne County APCD, Ventura County APCD, and Yolo-Solano AQMD

	Subpart	Air pollution control agency		
		Tuolumne County APCD	Ventura County APCD	Yolo-Solano AQMD
A	General Provisions		X	X
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971		X	X
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978		X	
Db	Industrial-Commercial-Institutional Steam Generating Units		X	X
Dc	Small Industrial-Commercial-Institutional Steam Generating Units		X	
E	Incinerators		X	
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994		X	
Eb	Large Municipal Waste Combustors Constructed After September 20, 1994			
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After			

Table 11 to Paragraph (d)(2)(ix)—Delegation Status for New Source Performance Standards for Tuolumne County APCD, Ventura County APCD, and Yolo-Solano AQMD

	Subpart	Air pollution control agency		
		Tuolumne County APCD	Ventura County APCD	Yolo-Solano AQMD
	June 20, 1996			
F	Portland Cement Plants		X	
G	Nitric Acid Plants		X	
H	Sulfuric Acid Plant		X	
I	Hot Mix Asphalt Facilities		X	X
J	Petroleum Refineries		X	X
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978		X	X
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984		X	
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984		X	
L	Secondary Lead Smelters		X	
M	Secondary Brass and Bronze Production Plants		X	
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973		X	
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983		X	
O	Sewage Treatment Plants		X	
P	Primary Copper Smelters		X	
Q	Primary Zinc Smelters		X	
R	Primary Lead Smelters		X	
S	Primary Aluminum Reduction Plants		X	
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants		X	
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants		X	
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants		X	
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants		X	

Table 11 to Paragraph (d)(2)(ix)—Delegation Status for New Source Performance Standards for Tuolumne County APCD, Ventura County APCD, and Yolo-Solano AQMD

	Subpart	Air pollution control agency		
		Tuolumne County APCD	Ventura County APCD	Yolo-Solano AQMD
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities		X	
Y	Coal Preparation and Processing Plants		X	
Z	Ferroalloy Production Facilities		X	
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983		X	X
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983		X	
BB	Kraft Pulp Mills		X	
CC	Glass Manufacturing Plants		X	
DD	Grain Elevators		X	
EE	Surface Coating of Metal Furniture		X	
FF	(Reserved)			
GG	Stationary Gas Turbines		X	
HH	Lime Manufacturing Plants		X	
KK	Lead-Acid Battery Manufacturing Plants		X	
LL	Metallic Mineral Processing Plants		X	
MM	Automobile and Light Duty Trucks Surface Coating Operations		X	
NN	Phosphate Rock Plants		X	
PP	Ammonium Sulfate Manufacture		X	
QQ	Graphic Arts Industry: Publication Rotogravure Printing		X	
RR	Pressure Sensitive Tape and Label Surface Coating Operations		X	
SS	Industrial Surface Coating: Large Appliances		X	
TT	Metal Coil Surface Coating		X	
UU	Asphalt Processing and Asphalt Roofing Manufacture		X	
VV	Equipment Leaks of VOC in the Synthetic Organic Industry Chemicals Manufacturing		X	
WW	Beverage Can Surface Coating Industry		X	

Table 11 to Paragraph (d)(2)(ix)—Delegation Status for New Source Performance Standards for Tuolumne County APCD, Ventura County APCD, and Yolo-Solano AQMD

	Subpart	Air pollution control agency		
		Tuolumne County APCD	Ventura County APCD	Yolo-Solano AQMD
XX	Bulk Gasoline Terminals			
AAA	New Residential Wood Heaters		X	
BBB	Rubber Tire Manufacturing Industry		X	
CCC	(Reserved)			
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry		X	
EEE	(Reserved)			
FFF	Flexible Vinyl and Urethane Coating and Printing		X	
GGG	Equipment Leaks of VOC in Petroleum Refineries		X	
GGGa	Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006			
HHH	Synthetic Fiber Production Facilities		X	
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes		X	
JJJ	Petroleum Dry Cleaners		X	
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants		X	
LLL	Onshore Natural Gas Processing: SO_2 Emissions		X	
MMM	(Reserved)			
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations		X	
OOO	Nonmetallic Mineral Processing Plants		X	X
PPP	Wool Fiberglass Insulation Manufacturing Plants		X	
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems		X	
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes		X	
SSS	Magnetic Tape Coating Facilities		X	
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines		X	
UUU	Calciners and Dryers in Mineral Industries		X	

Table 11 to Paragraph (d)(2)(ix)—Delegation Status for New Source Performance Standards for Tuolumne County APCD, Ventura County APCD, and Yolo-Solano AQMD

	Subpart	Air pollution control agency		
		Tuolumne County APCD	Ventura County APCD	Yolo-Solano AQMD
VVV	Polymeric Coating of Supporting Substrates Facilities		X	
WWW	Municipal Solid Waste Landfills	X	X	

(3) *Hawaii.* The following table identifies delegations for Hawaii:

Delegation Status for New Source Performance Standards for Hawaii:

Delegation Status for New Source Performance Standards for Hawaii

	Subpart	Hawaii
A	General Provisions	X
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971	X
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978	X
Db	Industrial-Commercial-Institutional Steam Generating Units	X
Dc	Small Industrial Steam Generating Units	X
E	Incinerators	X
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994	X
Eb	Municipal Waste Combustors Constructed After September 20, 1994	X
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996	X
F	Portland Cement Plants	X
G	Nitric Acid Plants	
H	Sulfuric Acid Plants	
I	Hot Mix Asphalt Facilities	X
J	Petroleum Refineries	X
Ja	Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007	
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	X
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	X
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction,	X

Delegation Status for New Source Performance Standards for Hawaii		
	Subpart	Hawaii
	Reconstruction, or Modification Commenced After July 23, 1984	
L	Secondary Lead Smelters	
M	Secondary Brass and Bronze Production Plants	
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973	
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983	
O	Sewage Treatment Plants	X
P	Primary Copper Smelters	
Q	Primary Zinc Smelters	
R	Primary Lead Smelters	
S	Primary Aluminum Reduction Plants	
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants	
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	
Y	Coal Preparation Plants	X
Z	Ferroalloy Production Facilities	
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983	X
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983	X
BB	Kraft pulp Mills	
CC	Glass Manufacturing Plants	
DD	Grain Elevators	
EE	Surface Coating of Metal Furniture	
FF	(Reserved)	
GG	Stationary Gas Turbines	X
HH	Lime Manufacturing Plants	
KK	Lead-Acid Battery Manufacturing Plants	

Delegation Status for New Source Performance Standards for Hawaii		
	Subpart	Hawaii
LL	Metallic Mineral Processing Plants	
MM	Automobile and Light Duty Trucks Surface Coating Operations	
NN	Phosphate Rock Plants	
PP	Ammonium Sulfate Manufacture	
QQ	Graphic Arts Industry: Publication Rotogravure Printing	
RR	Pressure Sensitive Tape and Label Surface Coating Operations	
SS	Industrial Surface Coating: Large Appliances	
TT	Metal Coil Surface Coating	
UU	Asphalt Processing and Asphalt Roofing Manufacture	
VV	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry	X
VVa	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006	
WW	Beverage Can Surface Coating Industry	X
XX	Bulk Gasoline Terminals	X
AAA	New Residential Wool Heaters	
BBB	Rubber Tire Manufacturing Industry	
CCC	(Reserved)	
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry	
EEE	(Reserved)	
FFF	Flexible Vinyl and Urethane Coating and Printing	
GGG	Equipment Leaks of VOC in Petroleum Refineries	X
GGGa	Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006	
HHH	Synthetic Fiber Production Facilities	
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes	
JJJ	Petroleum Dry Cleaners	X
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants	
LLL	Onshore Natural Gas Processing: SO2 Emissions	
MMM	(Reserved)	

Delegation Status for New Source Performance Standards for Hawaii

	Subpart	Hawaii
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations	X
OOO	Nonmetallic Mineral Processing Plants	X
PPP	Wool Fiberglass Insulation Manufacturing Plants	
QQQ	VOC Emissions From Petroleum Refinery Wastewater	X
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes	
SSS	Magnetic Tape Coating Facilities	
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines	
UUU	Calciners and Dryers in Mineral Industries	X
VVV	Polymeric Coating of Supporting Substrates Facilities	X
WWW	Municipal Solid Waste Landfills	X
AAAA	Small Municipal Waste Combustion Units for Which Construction is Commenced After August 30, 1999 or for Which Modification or Reconstruction is Commenced After June 6, 2001	X
CCCC	Commercial and Industrial Solid Waste Incineration Units for Which Construction Is Commenced After November 30, 1999 or for Which Modification or Reconstruction Is Commenced on or After June 1, 2001	X
EEEE	Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006	
GGGG	(Reserved)	
IIII	Stationary Compression Ignition Internal Combustion Engines	
JJJJ	Stationary Spark Ignition Internal Combustion Engines	
KKKK	Stationary Combustion Turbines	

(4) *Nevada.* The following table identifies delegations for Nevada:

Table 12 to Paragraph (d)(4)—Delegation Status for New Source Performance Standards for Nevada

	Subpart	Air pollution control agency		
		Nevada DEP	Clark County	Washoe County
A	General Provisions	X	X	X
Cf	Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills	X		
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971	X	X	X

Table 12 to Paragraph (d)(4)—Delegation Status for New Source Performance Standards for Nevada

	Subpart	Air pollution control agency		
		Nevada DEP	Clark County	Washoe County
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978	X	X	
Db	Industrial-Commercial-Institutional Steam Generating Units	X	X	
Dc	Small Industrial-Commercial-Institutional Steam Generating Units	X	X	
E	Incinerators	X	X	X
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994	X	X	
Eb	Large Municipal Waste Combustors Constructed After September 20, 1994	X	X	
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996	X	X	
F	Portland Cement Plants	X	X	X
G	Nitric Acid Plants	X	X	
Ga	Nitric Acid Plants For Which Construction, Reconstruction or Modification Commenced After October 14, 2011	X		
H	Sulfuric Acid Plant	X	X	
I	Hot Mix Asphalt Facilities	X	X	X
J	Petroleum Refineries	X	X	
Ja	Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007	X		
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	X	X	X
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	X	X	X
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	X	X	
L	Secondary Lead Smelters	X	X	X
M	Secondary Brass and Bronze Production Plants	X	X	
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973	X	X	
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983	X	X	

Table 12 to Paragraph (d)(4)—Delegation Status for New Source Performance Standards for Nevada

	Subpart	Air pollution control agency		
		Nevada DEP	Clark County	Washoe County
O	Sewage Treatment Plants	X	X	X
P	Primary Copper Smelters	X	X	X
Q	Primary Zinc Smelters	X	X	X
R	Primary Lead Smelters	X	X	X
S	Primary Aluminum Reduction Plants	X	X	
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants		X	
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants		X	
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants		X	
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants		X	
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities		X	
Y	Coal Preparation and Processing Plants	X	X	X
Z	Ferroalloy Production Facilities	X	X	
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983	X	X	
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983	X	X	
BB	Kraft Pulp Mills		X	
CC	Glass Manufacturing Plants	X	X	
DD	Grain Elevators	X	X	X
EE	Surface Coating of Metal Furniture	X	X	X
FF	(Reserved)			
GG	Stationary Gas Turbines	X	X	X
HH	Lime Manufacturing Plants	X	X	X
KK	Lead-Acid Battery Manufacturing Plants	X	X	X
LL	Metallic Mineral Processing Plants	X	X	X
MM	Automobile and Light Duty Trucks Surface Coating Operations	X	X	X
NN	Phosphate Rock Plants	X	X	X

Table 12 to Paragraph (d)(4)—Delegation Status for New Source Performance Standards for Nevada

	Subpart	Air pollution control agency		
		Nevada DEP	Clark County	Washoe County
PP	Ammonium Sulfate Manufacture	X	X	
QQ	Graphic Arts Industry: Publication Rotogravure Printing	X	X	X
RR	Pressure Sensitive Tape and Label Surface Coating Operations	X	X	
SS	Industrial Surface Coating: Large Appliances	X	X	X
TT	Metal Coil Surface Coating	X	X	X
UU	Asphalt Processing and Asphalt Roofing Manufacture	X	X	X
VV	Equipment Leaks of VOC in the Synthetic Organic Industry Chemicals Manufacturing	X	X	X
VVa	Equipment Leaks of VOC in the Synthetic Organic Industry for Which Construction, Reconstruction, or Chemicals Manufacturing Modification Commenced After November 7, 2006	X	X	
WW	Beverage Can Surface Coating Industry	X	X	
XX	Bulk Gasoline Terminals	X	X	
AAA	New Residential Wood Heaters		X	
BBB	Rubber Tire Manufacturing Industry	X	X	
CCC	(Reserved)			
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry	X	X	
EEE	(Reserved)			
FFF	Flexible Vinyl and Urethane Coating and Printing	X	X	
GGG	Equipment Leaks of VOC in Petroleum Refineries	X	X	
GGGa	Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006	X	X	
HHH	Synthetic Fiber Production Facilities	X	X	
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes	X	X	
JJJ	Petroleum Dry Cleaners	X	X	X
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants	X	X	
LLL	Onshore Natural Gas Processing: SO_2 Emissions	X	X	
MMM	(Reserved)			

Table 12 to Paragraph (d)(4)—Delegation Status for New Source Performance Standards for Nevada

	Subpart	Air pollution control agency		
		Nevada DEP	Clark County	Washoe County
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations	X	X	
OOO	Nonmetallic Mineral Processing Plants	X	X	
PPP	Wool Fiberglass Insulation Manufacturing Plants	X	X	
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems	X	X	
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes	X	X	
SSS	Magnetic Tape Coating Facilities	X	X	
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines	X	X	X
UUU	Calciners and Dryers in Mineral Industries	X	X	X
VVV	Polymeric Coating of Supporting Substrates Facilities	X	X	X
WWW	Municipal Solid Waste Landfills	X	X	X
XXX	Municipal Solid Waste Landfills that Commenced Construction, Reconstruction, or Modification after July 17, 2014	X		
AAAA	Small Municipal Waste Combustion Units for Which Construction is Commenced After August 30, 1999 or for Which Modification or Reconstruction is Commended After June 6, 2001	X	X	X
CCCC	Commercial and Industrial Solid Waste Incineration Units for Which Construction Is Commenced After November 30, 1999 or for Which Modification or Reconstruction Is Commenced on or After June 1, 2001	X	X	X
EEEE	Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006	X	X	X
GGGG	(Reserved)			
HHHH	(Reserved)			
IIII	Stationary Compression Ignition Internal Combustion Engines	X	X	X
JJJJ	Stationary Spark Ignition Internal Combustion Engines	X	X	X
KKKK	Stationary Combustion Turbines	X	X	X
LLLL	New Sewage Sludge Incineration Units		X	
OOOO	Crude Oil and Natural Gas Production, Transmission, and Distribution	X		

(5) *Guam.* The following table identifies delegations as of June 15, 2001:

Delegation Status for New Source Performance Standards for Guam		
	Subpart	Guam
A	General Provisions	X
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971	X
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978	
Db	Industrial-Commercial-Institutional Steam Generating Units	
Dc	Small Industrial Steam Generating Units	
E	Incinerators	
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994	
Eb	Municipal Waste Combustors Constructed After September 20, 1994	
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996	
F	Portland Cement Plants	X
G	Nitric Acid Plants	
H	Sulfuric Acid Plants	
I	Hot Mix Asphalt Facilities	X
J	Petroleum Refineries	X
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	X

(e) The following lists the specific part 60 standards that have been delegated unchanged to the air pollution control agencies in Region 6.

(1) *New Mexico.* The New Mexico Environment Department has been delegated all part 60 standards promulgated by the EPA, except subpart AAA—Standards of Performance for New Residential Wood Heaters; and subpart QQQQ—Standards of Performance for New Residential Hydronic Heaters and Forced-Air Furnaces, as amended in the Federal Register through January 15, 2017.

(2) *Louisiana.* The Louisiana Department of Environmental Quality has been delegated all part 60 standards promulgated by EPA, except subpart AAA—Standards of Performance for New Residential Wood Heaters, as amended in the Federal Register through July 1, 2013.

Delegation Status for Part 60 Standards—State of Louisiana **[Excluding Indian Country]**		
Subpart	Source category	LDEQ[1]
A	General Provisions	Yes
Ce	Emission Guidelines and Compliance Times for Hospital/Medical/Infectious Waste Incinerators	Yes
D	Fossil Fueled Steam Generators (>250 MM BTU/hr)	Yes

Delegation Status for Part 60 Standards—State of Louisiana

[Excluding Indian Country]

Subpart	Source category	LDEQ[1]
Da	Electric Utility Steam Generating Units (>250 MM BTU/hr)	Yes
Db	Industrial-Commercial-Institutional Steam Generating Units (100 to 250 MM BTU/hr)	Yes
Dc	Industrial-Commercial-Institutional Small Steam Generating Units (10 to 100 MM BTU/hr)	Yes
E	Incinerators (>50 tons per day)	Yes
Ea	Municipal Waste Combustors	Yes
Eb	Large Municipal Waste Combustors	Yes
Ec	Hospital/Medical/Infectious Waste Incinerators	Yes
F	Portland Cement Plants	Yes
G	Nitric Acid Plants	Yes
Ga	Nitric Acid Plants (after October 14, 2011)	Yes
H	Sulfuric Acid Plants	Yes
I	Hot Mix Asphalt Facilities	Yes
J	Petroleum Refineries	Yes
Ja	Petroleum Refineries (After May 14, 2007)	Yes
K	Storage Vessels for Petroleum Liquids (After 6/11/73 & Before 5/19/78)	Yes
Ka	Storage Vessels for Petroleum Liquids (After 6/11/73 & Before 5/19/78)	Yes
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Stg/Vessels) After 7/23/84	Yes
L	Secondary Lead Smelters Yes	Yes
M	Secondary Brass and Bronze Production Plants	Yes
N	Primary Emissions from Basic Oxygen Process Furnaces (Construction Commenced After June 11, 1973)	Yes
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities Construction is Commenced After January 20, 1983	Yes
O	Sewage Treatment Plants	Yes
P	Primary Copper Smelters	Yes
Q	Primary Zinc Smelters	Yes
R	Primary Lead Smelters	Yes
S	Primary Aluminum Reduction Plants	Yes
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Plants	Yes

Delegation Status for Part 60 Standards—State of Louisiana

[Excluding Indian Country]

Subpart	Source category	LDEQ[1]
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants	Yes
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	Yes
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	Yes
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	Yes
Y	Coal Preparation Plants	Yes
Z	Ferroalloy Production Facilities	Yes
AA	Steel Plants: Electric Arc Furnaces After 10/21/74 & On or Before 8/17/83	Yes
AAa	Steel Plants: Electric Arc Furnaces & Argon-Oxygen Decarburization Vessels After 8/07/83	Yes
BB	Kraft Pulp Mills	Yes
CC	Glass Manufacturing Plants	Yes
DD	Grain Elevators	Yes
EE	Surface Coating of Metal Furniture	Yes
GG	Stationary Gas Turbines	Yes
HH	Lime Manufacturing Plants	Yes
KK	Lead-Acid Battery Manufacturing Plants	Yes
LL	Metallic Mineral Processing Plants	Yes
MM	Automobile & Light Duty Truck Surface Coating Operations	Yes
NN	Phosphate Manufacturing Plants	Yes
PP	Ammonium Sulfate Manufacture	Yes
QQ	Graphic Arts Industry: Publication Rotogravure Printing	Yes
RR	Pressure Sensitive Tape and Label Surface Coating Operations	Yes
SS	Industrial Surface Coating: Large Appliances	Yes
TT	Metal Coil Surface Coating	Yes
UU	Asphalt Processing and Asphalt Roofing Manufacture	Yes
VV	VOC Equipment Leaks in the SOCMI Industry	Yes
VVa	VOC Equipment Leaks in the SOCMI Industry (After November 7, 2006)	Yes
XX	Bulk Gasoline Terminals	Yes
AAA	New Residential Wood Heaters	No

Delegation Status for Part 60 Standards—State of Louisiana

[Excluding Indian Country]

Subpart	Source category	LDEQ[1]
BBB	Rubber Tire Manufacturing Industry	Yes
DDD	Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry	Yes
FFF	Flexible Vinyl and Urethane Coating and Printing	Yes
GGG	VOC Equipment Leaks in Petroleum Refineries	Yes
HHH	Synthetic Fiber Production	Yes
III	VOC Emissions from the SOCMI Air Oxidation Unit Processes	Yes
JJJ	Petroleum Dry Cleaners	Yes
KKK	VOC Equipment Leaks From Onshore Natural Gas Processing Plants	Yes
LLL	Onshore Natural Gas Processing: SO_2 Emissions	Yes
NNN	VOC Emissions from SOCMI Distillation Operations	Yes
OOO	Nonmetallic Mineral Processing Plants	Yes
PPP	Wool Fiberglass Insulation Manufacturing Plants	Yes
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems	Yes
RRR	VOC Emissions from SOCMI Reactor Processes	Yes
SSS	Magnetic Tape Coating Operations	Yes
TTT	Industrial Surface Coating: Plastic Parts for Business Machines	Yes
UUU	Calciners and Dryers in Mineral Industries	Yes
VVV	Polymeric Coating of Supporting Substrates Facilities	Yes
WWW	Municipal Solid Waste Landfills	Yes
AAAA	Small Municipal Waste Combustion Units (Construction is Commenced After 8/30/99 or Modification/Reconstruction is Commenced After 6/06/2001)	Yes
CCCC	Commercial & Industrial Solid Waste Incineration Units (Construction is Commenced After 11/30/1999 or Modification/Reconstruction is Commenced on or After 6/01/2001)	Yes
DDDD	Emission Guidelines & Compliance Times for Commercial & Industrial Solid Waste Incineration Units (Commenced Construction On or Before 11/30/1999)	Yes
EEEE	Other Solid Waste Incineration Units (Constructed after 12/09/2004 or Modification/Reconstruction is commenced on or after 06/16/2004)	Yes
IIII	Stationary Compression Ignition Internal Combustion Engines	Yes
JJJJ	Stationary Spark Ignition Internal Combustion Engines	Yes

Delegation Status for Part 60 Standards—State of Louisiana

[Excluding Indian Country]

Subpart	Source category	LDEQ[1]
KKKK	Stationary Combustion Turbines (Construction Commenced After 02/18/2005)	Yes
LLLL	New Sewage Sludge Incineration Units	Yes
MMMM	Emission Guidelines and Compliance Times for Existing Sewage Sludge Incineration Units	Yes
OOOO	Crude Oil and Natural Gas Production, Transmission and Distribution	Yes

[1] The Louisiana Department of Environmental Quality (LDEQ) has been delegated all Part 60 standards promulgated by EPA, except subpart AAA—Standards of Performance for New Residential Wood Heaters—as amended in the Federal Register through July 1, 2013.

(3) *Albuquerque-Bernalillo County Air Quality Control Board.* The Albuquerque-Bernalillo County Air Quality Control Board has been delegated all part 60 standards promulgated by the EPA, except subpart AAA of this part and subpart QQQQ of this part as amended through January 23, 2017.

Editorial Note

Editorial Note: For Federal Register citations affecting § 60.4, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at *www.govinfo.gov.*

§ 60.5 Determination of construction or modification.

(a) When requested to do so by an owner or operator, the Administrator will make a determination of whether action taken or intended to be taken by such owner or operator constitutes construction (including reconstruction) or modification or the commencement thereof within the meaning of this part.

(b) The Administrator will respond to any request for a determination under paragraph (a) of this section within 30 days of receipt of such request.

§ 60.6 Review of plans.

(a) When requested to do so by an owner or operator, the Administrator will review plans for construction or modification for the purpose of providing technical advice to the owner or operator.

(b)

(1) A separate request shall be submitted for each construction or modification project.

(2) Each request shall identify the location of such project, and be accompanied by technical information describing the proposed nature, size, design, and method of operation of each affected facility involved in such project, including information on any equipment to be used for measurement or control of emissions.

(c) Neither a request for plans review nor advice furnished by the Administrator in response to such request shall

(1) relieve an owner or operator of legal responsibility for compliance with any provision of this part or of any applicable State or local requirement, or

(2) prevent the Administrator from implementing or enforcing any provision of this part or taking any other action authorized by the Act.

§ 60.7 Notification and record keeping.

(a) Any owner or operator subject to the provisions of this part shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, as follows:

(1) A notification of the date construction (or reconstruction as defined under § 60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.

(2) [Reserved]

(3) A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

(4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in § 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

(5) A notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with § 60.13(c). Notification shall be postmarked not less than 30 days prior to such date.

(6) A notification of the anticipated date for conducting the opacity observations required by § 60.11(e)(1) of this part. The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date.

(7) A notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during a performance test required by § 60.8 in lieu of Method 9 observation data as allowed by § 60.11(e)(5) of this part. This notification shall be postmarked not less than 30 days prior to the date of the performance test.

(b) Any owner or operator subject to the provisions of this part shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

(c) Each owner or operator required to install a continuous monitoring device shall submit excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and-or summary report form (see paragraph (d) of this section) to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six-month period. Written reports of excess emissions shall include the following information:

(1) The magnitude of excess emissions computed in accordance with § 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

(4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

(d) The summary report form shall contain the information and be in the format shown in figure 1 unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

(1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in § 60.7(c) need not be submitted unless requested by the Administrator.

(2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in § 60.7(c) shall both be submitted.

Figure 1—Summary Report—Gaseous and Opacity Excess Emission and Monitoring System Performance

Pollutant (Circle One—SO_2/NO_X/TRS/H_2S/CO/Opacity)

Reporting period dates: From _____ to _____

Company:

Emission Limitation

Address:

Monitor Manufacturer and Model No.

Date of Latest CMS Certification or Audit

Process Unit(s) Description:

Total source operating time in reporting period[1]

Emission data summary[1]		CMS performance summary[1]	
1. Duration of excess emissions in reporting period due to:		1. CMS downtime in reporting period due to:	
a. Startup/shutdown		a. Monitor equipment malfunctions	
b. Control equipment problems		b. Non-Monitor equipment malfunctions	
c. Process problems		c. Quality assurance calibration	
d. Other known causes		d. Other known causes	
e. Unknown causes		e. Unknown causes	
2. Total duration of excess emission		2. Total CMS Downtime	

Emission data summary[1]		CMS performance summary[1]	
3. Total duration of excess emissions × (100) [Total source operating time]	%[2]	3. [Total CMS Downtime] × (100) [Total source operating time]	%[2]

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in § 60.7(c) shall be submitted.

On a separate page, describe any changes since last quarter in CMS, process or controls. I certify that the information contained in this report is true, accurate, and complete.

Name

Signature

Title

Date

(e)

(1) Notwithstanding the frequency of reporting requirements specified in paragraph (c) of this section, an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

(i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;

(ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in this subpart and the applicable standard; and

(iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in paragraph (e)(2) of this section.

(2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an

excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in paragraphs (e)(1) and (e)(2) of this section.

(f) Any owner or operator subject to the provisions of this part shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

(1) This paragraph applies to owners or operators required to install a continuous emissions monitoring system (CEMS) where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (f) of this section, the owner or operator shall retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.

(2) This paragraph applies to owners or operators required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (f) of this section, the owner or operator shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator.

(3) The Administrator or delegated authority, upon notification to the source, may require the owner or operator to maintain all measurements as required by paragraph (f) of this section, if the Administrator or the delegated authority determines these records are required to more accurately assess the compliance status of the affected source.

(g) If notification substantially similar to that in paragraph (a) of this section is required by any other State or local agency, sending the Administrator a copy of that notification will satisfy the requirements of paragraph (a) of this section.

(h) Individual subparts of this part may include specific provisions which clarify or make inapplicable the provisions set forth in this section.

§ 60.8 Performance tests.

(a) Except as specified in paragraphs (a)(1),(a)(2), (a)(3), and (a)(4) of this section, within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility, or at such other times specified by this part, and at such other times as may be required by the Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).

(1) If a force majeure is about to occur, occurs, or has occurred for which the affected owner or operator intends to assert a claim of force majeure, the owner or operator shall notify the Administrator, in writing as soon as practicable following the date the owner or operator first knew, or through due diligence should

have known that the event may cause or caused a delay in testing beyond the regulatory deadline, but the notification must occur before the performance test deadline unless the initial force majeure or a subsequent force majeure event delays the notice, and in such cases, the notification shall occur as soon as practicable.

(2) The owner or operator shall provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in testing beyond the regulatory deadline to the force majeure; describe the measures taken or to be taken to minimize the delay; and identify a date by which the owner or operator proposes to conduct the performance test. The performance test shall be conducted as soon as practicable after the force majeure occurs.

(3) The decision as to whether or not to grant an extension to the performance test deadline is solely within the discretion of the Administrator. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an extension as soon as practicable.

(4) Until an extension of the performance test deadline has been approved by the Administrator under paragraphs (a)(1), (2), and (3) of this section, the owner or operator of the affected facility remains strictly subject to the requirements of this part.

(b) Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator

(1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology,

(2) approves the use of an equivalent method,

(3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance,

(4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or

(5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

(c) Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

(d) The owner or operator of an affected facility shall provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Administrator (or delegated State or local agency) as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator (or delegated State or local agency) by mutual agreement.

(e) The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

(1) Sampling ports adequate for test methods applicable to such facility. This includes

(i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and

(ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

(2) Safe sampling platform(s).

(3) Safe access to sampling platform(s).

(4) Utilities for sampling and testing equipment.

(f) Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method.

(1) Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.

(2) Contents of report (electronic or paper submitted copy). Unless otherwise specified in a relevant standard or test method, or as otherwise approved by the Administrator in writing, the report for a performance test shall include the elements identified in paragraphs (f)(2)(i) through (vi) of this section.

(i) General identification information for the facility including a mailing address, the physical address, the owner or operator or responsible official (where applicable) and his/her email address, and the appropriate Federal Registry System (FRS) number for the facility.

(ii) Purpose of the test including the applicable regulation(s) requiring the test, the pollutant(s) and other parameters being measured, the applicable emission standard and any process parameter component, and a brief process description.

(iii) Description of the emission unit tested including fuel burned, control devices, and vent characteristics; the appropriate source classification code (SCC); the permitted maximum process rate (where applicable); and the sampling location.

(iv) Description of sampling and analysis procedures used and any modifications to standard procedures, quality assurance procedures and results, record of process operating conditions that demonstrate the applicable test conditions are met, and values for any operating parameters for which limits were being set during the test.

(v) Where a test method requires you record or report, the following shall be included: Record of preparation of standards, record of calibrations, raw data sheets for field sampling, raw data sheets for field and laboratory analyses, chain-of-custody documentation, and example calculations for reported results.

(vi) Identification of the company conducting the performance test including the primary office address, telephone number, and the contact for this test program including his/her email address.

(g) The performance testing shall include a test method performance audit (PA) during the performance test. The PAs consist of blind audit samples supplied by an accredited audit sample provider and analyzed during the performance test in order to provide a measure of test data bias. Gaseous audit samples are designed to audit the performance of the sampling system as well as the analytical system and must be collected by the sampling system during the compliance test just as the compliance samples are collected. If a liquid or solid audit sample is designed to audit the sampling system, it must also be collected by the sampling system during the compliance test. If multiple sampling systems or sampling trains are used during the compliance test for any of the test methods, the tester is only required to use one of the sampling systems per method to collect the audit sample. The audit sample must be analyzed by the same analyst using the same analytical reagents and analytical system and at the same time as the compliance samples. Retests are required when there is a failure to produce acceptable results for an audit sample. However, if the audit results do not affect the compliance or noncompliance status of the affected facility, the compliance authority may waive the reanalysis requirement, further audits, or retests and accept the results of the compliance test. Acceptance of the test results shall constitute a waiver of the reanalysis requirement, further audits, or retests. The compliance authority may also use the audit sample failure and the compliance test results as evidence to determine the compliance or noncompliance status of the affected facility. A blind audit sample is a sample whose value is known only to the sample provider and is not revealed to the tested facility until after they report the measured value of the audit sample. For pollutants that exist in the gas phase at ambient temperature, the audit sample shall consist of an appropriate concentration of the pollutant in air or nitrogen that can be introduced into the sampling system of the test method at or near the same entry point as a sample from the emission source. If no gas phase audit samples are available, an acceptable alternative is a sample of the pollutant in the same matrix that would be produced when the sample is recovered from the sampling system as required by the test method. For samples that exist only in a liquid or solid form at ambient temperature, the audit sample shall consist of an appropriate concentration of the pollutant in the same matrix that would be produced when the sample is recovered from the sampling system as required by the test method. An accredited audit sample provider (AASP) is an organization that has been accredited to prepare audit samples by an independent, third party accrediting body.

(1) The source owner, operator, or representative of the tested facility shall obtain an audit sample, if commercially available, from an AASP for each test method used for regulatory compliance purposes. No audit samples are required for the following test methods: Methods 3A and 3C of appendix A-3 of part 60, Methods 6C, 7E, 9, and 10 of appendix A-4 of part 60, Methods 18 and 19 of appendix A-6 of part 60, Methods 20, 22, and 25A of appendix A-7 of part 60, Methods 30A and 30B of appendix A-8 of part 60, and Methods 303, 318, 320, and 321 of appendix A of part 63 of this chapter. If multiple sources at a single facility are tested during a compliance test event, only one audit sample is required for each method used during a compliance test. The compliance authority responsible for the compliance test may waive the requirement to include an audit sample if they believe that an audit sample is not necessary. “Commercially available” means that two or more independent AASPs have blind audit samples available for purchase. If the source owner, operator, or representative cannot find an audit sample for a specific method, the owner, operator, or representative shall consult the EPA Web site at the following URL, *www.epa.gov/ttn/emc,* to confirm whether there is a source that can supply an audit sample for that method. If the EPA Web site does not list an available audit sample at least 60 days prior to the beginning of the compliance test, the source owner, operator, or representative shall not be required to include an audit sample as part of the quality assurance program for the compliance test. When ordering an audit sample, the source owner, operator, or representative shall give the sample provider an estimate for the concentration of each pollutant that is emitted by the source or the estimated concentration of each pollutant based on the permitted level and the name, address, and phone number of the compliance authority. The source owner, operator, or representative shall report the results for the audit sample along with a summary of the emission test results for the audited pollutant to the compliance authority and shall report the results of the audit sample to the AASP. The source owner, operator, or representative shall make both reports at the same time and in

the same manner or shall report to the compliance authority first and then report to the AASP. If the method being audited is a method that allows the samples to be analyzed in the field and the tester plans to analyze the samples in the field, the tester may analyze the audit samples prior to collecting the emission samples provided a representative of the compliance authority is present at the testing site. The tester may request and the compliance authority may grant a waiver to the requirement that a representative of the compliance authority must be present at the testing site during the field analysis of an audit sample. The source owner, operator, or representative may report the results of the audit sample to the compliance authority and report the results of the audit sample to the AASP prior to collecting any emission samples. The test protocol and final test report shall document whether an audit sample was ordered and utilized and the pass/fail results as applicable.

(2) An AASP shall have and shall prepare, analyze, and report the true value of audit samples in accordance with a written technical criteria document that describes how audit samples will be prepared and distributed in a manner that will ensure the integrity of the audit sample program. An acceptable technical criteria document shall contain standard operating procedures for all of the following operations:

(i) Preparing the sample;

(ii) Confirming the true concentration of the sample;

(iii) Defining the acceptance limits for the results from a well-qualified tester. This procedure must use well established statistical methods to analyze historical results from well qualified testers. The acceptance limits shall be set so that there is 95 percent confidence that 90 percent of well qualified labs will produce future results that are within the acceptance limit range.

(iv) Providing the opportunity for the compliance authority to comment on the selected concentration level for an audit sample;

(v) Distributing the sample to the user in a manner that guarantees that the true value of the sample is unknown to the user;

(vi) Recording the measured concentration reported by the user and determining if the measured value is within acceptable limits;

(vii) The AASP shall report the results from each audit sample in a timely manner to the compliance authority and then to the source owner, operator, or representative. The AASP shall make both reports at the same time and in the same manner or shall report to the compliance authority first and then report to the source owner, operator, or representative. The results shall include the name of the facility tested, the date on which the compliance test was conducted, the name of the company performing the sample collection, the name of the company that analyzed the compliance samples including the audit sample, the measured result for the audit sample, and whether the testing company passed or failed the audit. The AASP shall report the true value of the audit sample to the compliance authority. The AASP may report the true value to the source owner, operator, or representative if the AASP's operating plan ensures that no laboratory will receive the same audit sample twice.

(viii) Evaluating the acceptance limits of samples at least once every two years to determine in cooperation with the voluntary consensus standard body if they should be changed;

(ix) Maintaining a database, accessible to the compliance authorities, of results from the audit that shall include the name of the facility tested, the date on which the compliance test was conducted, the name of the company performing the sample collection, the name of the company that analyzed the compliance samples including the audit sample, the measured result for the audit sample, the true value of the audit sample, the acceptance range for the measured value, and whether the testing company passed or failed the audit.

(3) The accrediting body shall have a written technical criteria document that describes how it will ensure that the AASP is operating in accordance with the AASP technical criteria document that describes how audit samples are to be prepared and distributed. This document shall contain standard operating procedures for all of the following operations:

(i) Checking audit samples to confirm their true value as reported by the AASP;

(ii) Performing technical systems audits of the AASP's facilities and operating procedures at least once every two years;

(iii) Providing standards for use by the voluntary consensus standard body to approve the accrediting body that will accredit the audit sample providers.

(4) The technical criteria documents for the accredited sample providers and the accrediting body shall be developed through a public process guided by a voluntary consensus standards body (VCSB). The VCSB shall operate in accordance with the procedures and requirements in the Office of Management and Budget Circular A-119. A copy of Circular A-119 is available upon request by writing the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW., Washington, DC 20503, by calling (202) 395-6880 or downloading online at *http://standards.gov/standards__gov/a119.cfm.* The VCSB shall approve all accrediting bodies. The Administrator will review all technical criteria documents. If the technical criteria documents do not meet the minimum technical requirements in paragraphs (g)(2) through (4)of this section, the technical criteria documents are not acceptable and the proposed audit sample program is not capable of producing audit samples of sufficient quality to be used in a compliance test. All acceptable technical criteria documents shall be posted on the EPA Web site at the following URL, *http://www.epa.gov/ttn/emc.*

(h) Unless otherwise specified in the applicable subpart, each test location must be verified to be free of cyclonic flow and evaluated for the existence of emission gas stratification and the required number of sampling traverse points. If other procedures are not specified in the applicable subpart to the regulations, use the appropriate procedures in Method 1 to check for cyclonic flow and Method 7E to evaluate emission gas stratification and selection of sampling points.

(i) Whenever the use of multiple calibration gases is required by a test method, performance specification, or quality assurance procedure in a part 60 standard or appendix, Method 205 of 40 CFR part 51, appendix M of this chapter, “Verification of Gas Dilution Systems for Field Instrument Calibrations,” may be used.

§ 60.9 Availability of information.

The availability to the public of information provided to, or otherwise obtained by, the Administrator under this part shall be governed by part 2 of this chapter. (Information submitted voluntarily to the Administrator for the purposes of §§ 60.5 and 60.6 is governed by §§ 2.201 through 2.213 of this chapter and not by § 2.301 of this chapter.)

§ 60.10 State authority.

The provisions of this part shall not be construed in any manner to preclude any State or political subdivision thereof from:

(a) Adopting and enforcing any emission standard or limitation applicable to an affected facility, provided that such emission standard or limitation is not less stringent than the standard applicable to such facility.

(b) Requiring the owner or operator of an affected facility to obtain permits, licenses, or approvals prior to initiating construction, modification, or operation of such facility.

§ 60.11 Compliance with standards and maintenance requirements.

(a) Compliance with standards in this part, other than opacity standards, shall be determined in accordance with performance tests established by § 60.8, unless otherwise specified in the applicable standard.

(b) Compliance with opacity standards in this part shall be determined by conducting observations in accordance with Method 9 in appendix A of this part, any alternative method that is approved by the Administrator, or as provided in paragraph (e)(5) of this section. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

(c) The opacity standards set forth in this part shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

(d) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(e)

(1) For the purpose of demonstrating initial compliance, opacity observations shall be conducted concurrently with the initial performance test required in § 60.8 unless one of the following conditions apply. If no performance test under § 60.8 is required, then opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. If visibility or other conditions prevent the opacity observations from being conducted concurrently with the initial performance test required under § 60.8, the source owner or operator shall reschedule the opacity observations as soon after the initial performance test as possible, but not later than 30 days thereafter, and shall advise the Administrator of the rescheduled date. In these cases, the 30-day prior notification to the Administrator required in § 60.7(a)(6) shall be waived. The rescheduled opacity observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial performance test conducted under § 60.8. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity observations from being made concurrently with the initial performance test in accordance with procedures contained in Method 9 of appendix B of this part. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. The owner or operator of an affected facility shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. Except as provided in paragraph (e)(5) of this section, the results of continuous monitoring by transmissometer which indicate that the opacity at the time visual observations were made was not in excess of the standard are probative but not conclusive evidence of the actual opacity of an emission, provided that the source shall meet the burden of proving that the instrument used meets (at the time of the alleged violation) Performance Specification 1 in appendix B of this part, has been properly maintained and (at the time of the alleged violation) that the resulting data have not been altered in any way.

(2) Except as provided in paragraph (e)(3) of this section, the owner or operator of an affected facility to which an opacity standard in this part applies shall conduct opacity observations in accordance with paragraph (b) of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results along with the results of the initial performance test required under § 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

(3) The owner or operator of an affected facility to which an opacity standard in this part applies may request the Administrator to determine and to record the opacity of emissions from the affected facility

during the initial performance test and at such times as may be required. The owner or operator of the affected facility shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the notification required in § 60.7(a)(6). If, for some reason, the Administrator cannot determine and record the opacity of emissions from the affected facility during the performance test, then the provisions of paragraph (e)(1) of this section shall apply.

(4) An owner or operator of an affected facility using a continuous opacity monitor (transmissometer) shall record the monitoring data produced during the initial performance test required by § 60.8 and shall furnish the Administrator a written report of the monitoring results along with Method 9 and § 60.8 performance test results.

(5) An owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under § 60.8 in lieu of Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under § 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under § 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under § 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under § 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in § 60.13(c) of this part, that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which Method 9 data indicates noncompliance, the Method 9 data will be used to determine compliance with the opacity standard.

(6) Upon receipt from an owner or operator of the written reports of the results of the performance tests required by § 60.8, the opacity observation results and observer certification required by § 60.11(e)(1), and the COMS results, if applicable, the Administrator will make a finding concerning compliance with opacity and other applicable standards. If COMS data results are used to comply with an opacity standard, only those results are required to be submitted along with the performance test results required by § 60.8. If the Administrator finds that an affected facility is in compliance with all applicable standards for which performance tests are conducted in accordance with § 60.8 of this part but during the time such performance tests are being conducted fails to meet any applicable opacity standard, he shall notify the owner or operator and advise him that he may petition the Administrator within 10 days of receipt of notification to make appropriate adjustment to the opacity standard for the affected facility.

(7) The Administrator will grant such a petition upon a demonstration by the owner or operator that the affected facility and associated air pollution control equipment was operated and maintained in a manner to minimize the opacity of emissions during the performance tests; that the performance tests were performed under the conditions established by the Administrator; and that the affected facility and associated air pollution control equipment were incapable of being adjusted or operated to meet the applicable opacity standard.

(8) The Administrator will establish an opacity standard for the affected facility meeting the above requirements at a level at which the source will be able, as indicated by the performance and opacity tests, to meet the opacity standard at all times during which the source is meeting the mass or concentration emission standard. The Administrator will promulgate the new opacity standard in the Federal Register.

(f) Special provisions set forth under an applicable subpart shall supersede any conflicting provisions in paragraphs (a) through (e) of this section.

(g) For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

§ 60.12 Circumvention.

No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

§ 60.13 Monitoring requirements.

(a) For the purposes of this section, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of this section upon promulgation of performance specifications for continuous monitoring systems under appendix B to this part and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, appendix F to this part, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987.

(b) All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests under § 60.8. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device.

(c) If the owner or operator of an affected facility elects to submit continuous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under § 60.11(e)(5), he shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, appendix B, of this part before the performance test required under § 60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under § 60.8 or within 30 days thereafter in accordance with the applicable performance specification in appendix B of this part, The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act.

(1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under § 60.8 and as described in § 60.11(e)(5) shall furnish the Administrator two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in paragraph (c) of this section at least 10 days before the performance test required under § 60.8 is conducted.

(2) Except as provided in paragraph (c)(1) of this section, the owner or operator of an affected facility shall furnish the Administrator within 60 days of completion two or, upon request, more copies of a written report of the results of the performance evaluation.

(d)

(1) Owners and operators of a CEMS installed in accordance with the provisions of this part, must check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once each operating day in accordance with a written procedure. The zero and span must, at a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift

exceeds two times the limit of the applicable performance specification in appendix B of this part. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified. Owners and operators of a COMS installed in accordance with the provisions of this part must check the zero and upscale (span) calibration drifts at least once daily. For a particular COMS, the acceptable range of zero and upscale calibration materials is defined in the applicable version of PS-1 in appendix B of this part. For a COMS, the optical surfaces, exposed to the effluent gases, must be cleaned before performing the zero and upscale drift adjustments, except for systems using automatic zero adjustments. The optical surfaces must be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

(2) Unless otherwise approved by the Administrator, the following procedures must be followed for a COMS. Minimum procedures must include an automated method for producing a simulated zero opacity condition and an upscale opacity condition using a certified neutral density filter or other related technique to produce a known obstruction of the light beam. Such procedures must provide a system check of all active analyzer internal optics with power or curvature, all active electronic circuitry including the light source and photodetector assembly, and electronic or electro-mechanical systems and hardware and or software used during normal measurement operation.

(e) Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under paragraph (d) of this section, all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

(1) All continuous monitoring systems referenced by paragraph (c) of this section for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(2) All continuous monitoring systems referenced by paragraph (c) of this section for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(f) All continuous monitoring systems or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of appendix B of this part shall be used.

(g) When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system.

(h)

(1) Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in § 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period.

(2) For continuous monitoring systems other than opacity, 1-hour averages shall be computed as follows, except that the provisions pertaining to the validation of partial operating hours are only applicable for affected facilities that are required by the applicable subpart to include partial hours in the emission calculations:

(i) Except as provided under paragraph (h)(2)(iii) of this section, for a full operating hour (any clock hour with 60 minutes of unit operation), at least four valid data points are required to calculate the hourly average, *i.e.*, one data point in each of the 15-minute quadrants of the hour.

(ii) Except as provided under paragraph (h)(2)(iii) of this section, for a partial operating hour (any clock hour with less than 60 minutes of unit operation), at least one valid data point in each 15-minute quadrant of the hour in which the unit operates is required to calculate the hourly average.

(iii) For any operating hour in which required maintenance or quality-assurance activities are performed:

(A) If the unit operates in two or more quadrants of the hour, a minimum of two valid data points, separated by at least 15 minutes, is required to calculate the hourly average; or

(B) If the unit operates in only one quadrant of the hour, at least one valid data point is required to calculate the hourly average.

(iv) If a daily calibration error check is failed during any operating hour, all data for that hour shall be invalidated, unless a subsequent calibration error test is passed in the same hour and the requirements of paragraph (h)(2)(iii) of this section are met, based solely on valid data recorded after the successful calibration.

(v) For each full or partial operating hour, all valid data points shall be used to calculate the hourly average.

(vi) Except as provided under paragraph (h)(2)(vii) of this section, data recorded during periods of continuous monitoring system breakdown, repair, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph.

(vii) Owners and operators complying with the requirements of § 60.7(f)(1) or (2) must include any data recorded during periods of monitor breakdown or malfunction in the data averages.

(viii) When specified in an applicable subpart, hourly averages for certain partial operating hours shall not be computed or included in the emission averages (e.g., hours with < 30 minutes of unit operation under § 60.47b(d)).

(ix) Either arithmetic or integrated averaging of all data may be used to calculate the hourly averages. The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O_2 or ng/J of pollutant).

(3) All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in the applicable subpart. After conversion into units of the standard, the data may be rounded to the same number of significant digits used in the applicable subpart to specify the emission limit.

(i) After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring procedures or requirements of this part including, but not limited to the following:

(1) Alternative monitoring requirements when installation of a continuous monitoring system or monitoring device specified by this part would not provide accurate measurements due to liquid water or other interferences caused by substances in the effluent gases.

(2) Alternative monitoring requirements when the affected facility is infrequently operated.

(3) Alternative monitoring requirements to accommodate continuous monitoring systems that require additional measurements to correct for stack moisture conditions.

(4) Alternative locations for installing continuous monitoring systems or monitoring devices when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements.

(5) Alternative methods of converting pollutant concentration measurements to units of the standards.

(6) Alternative procedures for performing daily checks of zero and span drift that do not involve use of span gases or test cells.

(7) Alternatives to the A.S.T.M. test methods or sampling procedures specified by any subpart.

(8) Alternative continuous monitoring systems that do not meet the design or performance requirements in Performance Specification 1, appendix B, but adequately demonstrate a definite and consistent relationship between its measurements and the measurements of opacity by a system complying with the requirements in Performance Specification 1. The Administrator may require that such demonstration be performed for each affected facility.

(9) Alternative monitoring requirements when the effluent from a single affected facility or the combined effluent from two or more affected facilities is released to the atmosphere through more than one point.

(j) An alternative to the relative accuracy (RA) test specified in Performance Specification 2 of appendix B may be requested as follows:

(1) An alternative to the reference method tests for determining RA is available for sources with emission rates demonstrated to be less than 50 percent of the applicable standard. A source owner or operator may petition the Administrator to waive the RA test in Section 8.4 of Performance Specification 2 and substitute the procedures in Section 16.0 if the results of a performance test conducted according to the requirements in § 60.8 of this subpart or other tests performed following the criteria in § 60.8 demonstrate that the emission rate of the pollutant of interest in the units of the applicable standard is less than 50 percent of the applicable standard. For sources subject to standards expressed as control efficiency levels, a source owner or operator may petition the Administrator to waive the RA test and substitute the procedures in Section 16.0 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the continuous emission monitoring system is used to determine compliance continuously with the applicable standard. The petition to waive the RA test shall include a detailed description of the procedures to be applied. Included shall be location and procedure for conducting the alternative, the concentration or response levels of the alternative RA materials, and the other equipment checks included in the alternative procedure. The Administrator will review the petition for completeness and applicability. The determination to grant a waiver will depend on the intended use of the CEMS data (e.g., data collection purposes other than NSPS) and may require specifications more stringent than in Performance Specification 2 (e.g., the applicable emission limit is more stringent than NSPS).

(2) The waiver of a CEMS RA test will be reviewed and may be rescinded at such time, following successful completion of the alternative RA procedure, that the CEMS data indicate that the source emissions are approaching the level. The criterion for reviewing the waiver is the collection of CEMS data showing that emissions have exceeded 70 percent of the applicable standard for seven, consecutive, averaging periods as specified by the applicable regulation(s). For sources subject to standards expressed as control efficiency levels, the criterion for reviewing the waiver is the collection of CEMS data showing that exhaust emissions have exceeded 70 percent of the level needed to meet the control efficiency requirement for seven, consecutive, averaging periods as specified by the applicable regulation(s) [e.g., §§ 60.45(g) (2) and (3),

60.73(e), and 60.84(e)]. It is the responsibility of the source operator to maintain records and determine the level of emissions relative to the criterion on the waiver of RA testing. If this criterion is exceeded, the owner or operator must notify the Administrator within 10 days of such occurrence and include a description of the nature and cause of the increasing emissions. The Administrator will review the notification and may rescind the waiver and require the owner or operator to conduct a RA test of the CEMS as specified in Section 8.4 of Performance Specification 2.

Editorial Note

Editorial Note: For Federal Register citations affecting § 60.13, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at *www.govinfo.gov.*

§ 60.14 Modification.

(a) Except as provided under paragraphs (e) and (f) of this section, any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.

(b) Emission rate shall be expressed as kg/hr of any pollutant discharged into the atmosphere for which a standard is applicable. The Administrator shall use the following to determine emission rate:

(1) Emission factors as specified in the latest issue of "Compilation of Air Pollutant Emission Factors," EPA Publication No. AP-42, or other emission factors determined by the Administrator to be superior to AP-42 emission factors, in cases where utilization of emission factors demonstrates that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.

(2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in paragraph (b)(1) of this section does not demonstrate to the Administrator's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Administrator's satisfaction that there are reasonable grounds to dispute the result obtained by the Administrator utilizing emission factors as referenced in paragraph (b)(1) of this section. When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in appendix C of this part shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Administrator shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs.

(c) The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of this part any other facility within that source.

(d) [Reserved]

(e) The following shall not, by themselves, be considered modifications under this part:

(1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category, subject to the provisions of paragraph (c) of this section and § 60.15.

(2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.

(3) An increase in the hours of operation.

(4) Use of an alternative fuel or raw material if, prior to the date any standard under this part becomes applicable to that source type, as provided by § 60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.

(5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial.

(6) The relocation or change in ownership of an existing facility.

(f) Special provisions set forth under an applicable subpart of this part shall supersede any conflicting provisions of this section.

(g) Within 180 days of the completion of any physical or operational change subject to the control measures specified in paragraph (a) of this section, compliance with all applicable standards must be achieved.

(h) No physical change, or change in the method of operation, at an existing electric utility steam generating unit shall be treated as a modification for the purposes of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the 5 years prior to the change.

(i) Repowering projects that are awarded funding from the Department of Energy as permanent clean coal technology demonstration projects (or similar projects funded by EPA) are exempt from the requirements of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the five years prior to the change.

(j)

(1) Repowering projects that qualify for an extension under section 409(b) of the Clean Air Act are exempt from the requirements of this section, provided that such change does not increase the actual hourly emissions of any pollutant regulated under this section above the actual hourly emissions achievable at that unit during the 5 years prior to the change.

(2) This exemption shall not apply to any new unit that:

(i) Is designated as a replacement for an existing unit;

(ii) Qualifies under section 409(b) of the Clean Air Act for an extension of an emission limitation compliance date under section 405 of the Clean Air Act; and

(iii) Is located at a different site than the existing unit.

(k) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project is exempt from the requirements of this section. A *temporary clean coal control technology demonstration project,* for the purposes of this section is a clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with the State implementation plan for the State in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

(l) The reactivation of a very clean coal-fired electric utility steam generating unit is exempt from the requirements of this section.

§ 60.15 Reconstruction.

(a) An existing facility, upon reconstruction, becomes an affected facility, irrespective of any change in emission rate.

(b) "Reconstruction" means the replacement of components of an existing facility to such an extent that:

(1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, and

(2) It is technologically and economically feasible to meet the applicable standards set forth in this part.

(c) "Fixed capital cost" means the capital needed to provide all the depreciable components.

(d) If an owner or operator of an existing facility proposes to replace components, and the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, he shall notify the Administrator of the proposed replacements. The notice must be postmarked 60 days (or as soon as practicable) before construction of the replacements is commenced and must include the following information:

(1) Name and address of the owner or operator.

(2) The location of the existing facility.

(3) A brief description of the existing facility and the components which are to be replaced.

(4) A description of the existing air pollution control equipment and the proposed air pollution control equipment.

(5) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new facility.

(6) The estimated life of the existing facility after the replacements.

(7) A discussion of any economic or technical limitations the facility may have in complying with the applicable standards of performance after the proposed replacements.

(e) The Administrator will determine, within 30 days of the receipt of the notice required by paragraph (d) of this section and any additional information he may reasonably require, whether the proposed replacement constitutes reconstruction.

(f) The Administrator's determination under paragraph (e) shall be based on:

(1) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new facility;

(2) The estimated life of the facility after the replacements compared to the life of a comparable entirely new facility;

(3) The extent to which the components being replaced cause or contribute to the emissions from the facility; and

(4) Any economic or technical limitations on compliance with applicable standards of performance which are inherent in the proposed replacements.

(g) Individual subparts of this part may include specific provisions which refine and delimit the concept of reconstruction set forth in this section.

§ 60.16 Priority list.

Prioritized Major Source Categories	
Priority Number[1]	*Source Category*
1.	Synthetic Organic Chemical Manufacturing Industry (SOCMI) and Volatile Organic Liquid Storage Vessels and Handling Equipment
	(a) SOCMI unit processes
	(b) Volatile organic liquid (VOL) storage vessels and handling equipment
	(c) SOCMI fugitive sources
	(d) SOCMI secondary sources
2.	Industrial Surface Coating: Cans
3.	Petroleum Refineries: Fugitive Sources
4.	Industrial Surface Coating: Paper
5.	Dry Cleaning
	(a) Perchloroethylene
	(b) Petroleum solvent
6.	Graphic Arts
7.	Polymers and Resins: Acrylic Resins
8.	Mineral Wool (Deleted)
9.	Stationary Internal Combustion Engines
10.	Industrial Surface Coating: Fabric
11.	Industrial-Commercial-Institutional Steam Generating Units.
12.	Incineration: Non-Municipal (Deleted)
13.	Non-Metallic Mineral Processing
14.	Metallic Mineral Processing
15.	Secondary Copper (Deleted)
16.	Phosphate Rock Preparation
17.	Foundries: Steel and Gray Iron
18.	Polymers and Resins: Polyethylene
19.	Charcoal Production
20.	Synthetic Rubber

Prioritized Major Source Categories	
Priority Number[1]	*Source Category*
	(a) Tire manufacture
	(b) SBR production
21.	Vegetable Oil
22.	Industrial Surface Coating: Metal Coil
23.	Petroleum Transportation and Marketing
24.	By-Product Coke Ovens
25.	Synthetic Fibers
26.	Plywood Manufacture
27.	Industrial Surface Coating: Automobiles
28.	Industrial Surface Coating: Large Appliances
29.	Crude Oil and Natural Gas Production
30.	Secondary Aluminum
31.	Potash (Deleted)
32.	Lightweight Aggregate Industry: Clay, Shale, and Slate[2]
33.	Glass
34.	Gypsum
35.	Sodium Carbonate
36.	Secondary Zinc (Deleted)
37.	Polymers and Resins: Phenolic
38.	Polymers and Resins: Urea-Melamine
39.	Ammonia (Deleted)
40.	Polymers and Resins: Polystyrene
41.	Polymers and Resins: ABS-SAN Resins
42.	Fiberglass
43.	Polymers and Resins: Polypropylene
44.	Textile Processing
45.	Asphalt Processing and Asphalt Roofing Manufacture
46.	Brick and Related Clay Products

Prioritized Major Source Categories	
Priority Number[1]	*Source Category*
47.	Ceramic Clay Manufacturing (Deleted)
48.	Ammonium Nitrate Fertilizer
49.	Castable Refractories (Deleted)
50.	Borax and Boric Acid (Deleted)
51.	Polymers and Resins: Polyester Resins
52.	Ammonium Sulfate
53.	Starch
54.	Perlite
55.	Phosphoric Acid: Thermal Process (Deleted)
56.	Uranium Refining
57.	Animal Feed Defluorination (Deleted)
58.	Urea (for fertilizer and polymers)
59.	Detergent (Deleted)
Other Source Categories	
Lead acid battery manufacture[3]	
Organic solvent cleaning[3]	
Industrial surface coating: metal furniture[3]	
Stationary gas turbines[4]	
Municipal solid waste landfills[4]	
[1] Low numbers have highest priority, e.g., No. 1 is high priority, No. 59 is low priority.	
[2] Formerly titled “Sintering: Clay and Fly Ash”.	
[3] Minor source category, but included on list since an NSPS is being developed for that source category.	
[4] Not prioritized, since an NSPS for this major source category has already been promulgated.	

§ 60.17 Incorporations by reference.

(a)

(1) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, the U.S. Environmental Protection Agency (EPA) must publish a document in the Federal Register and the material must be available to the public. All approved incorporation by reference (IBR)

material is available for inspection at the EPA and at the National Archives and Records Administration (NARA). Contact the EPA at: EPA Docket Center, Public Reading Room, EPA WJC West, Room 3334, 1301 Constitution Ave. NW, Washington, DC; phone: (202) 566-1744. For information on the availability of this material at NARA, visit *www.archives.gov/federal-register/cfr/ibr-locations* or email *fr.inspection@nara.gov*.

(2) The IBR material may be obtained from the sources in the following paragraphs of this section or from one or more private resellers listed in this paragraph (a)(2). For material that is no longer commercially available, contact: the EPA (see paragraph (a)(1) of this section).

(i) Accuris Standards Store, 321 Inverness Drive, South Englewood, CO 80112; phone: (800) 332-6077; website: *https://store.accuristech.com*.

(ii) American National Standards Institute (ANSI), see paragraph (d) of this section.

(iii) GlobalSpec, 257 Fuller Road, Suite NFE 1100, Albany, NY 12203-3621; phone: (800) 261-2052; website: *https://standards.globalspec.com*.

(iv) Nimonik Document Center, 401 Roland Way, Suite 224, Oakland, CA 94624; phone (650) 591-7600; email: *info@document-center.com*; website: *www.document-center.com*.

(v) Techstreet, phone: (855) 999-9870; email: *store@techstreet.com*; website: *www.techstreet.com*.

(b) American Gas Association, available through ILI Infodisk, 610 Winters Avenue, Paramus, New Jersey 07652:

(1) American Gas Association Report No. 3: Orifice Metering for Natural Gas and Other Related Hydrocarbon Fluids, Part 1: General Equations and Uncertainty Guidelines (1990), IBR approved for § 60.107a(d).

(2) American Gas Association Report No. 3: Orifice Metering for Natural Gas and Other Related Hydrocarbon Fluids, Part 2: Specification and Installation Requirements (2000), IBR approved for § 60.107a(d).

(3) American Gas Association Report No. 11: Measurement of Natural Gas by Coriolis Meter (2003), IBR approved for § 60.107a(d).

(4) American Gas Association Transmission Measurement Committee Report No. 7: Measurement of Gas by Turbine Meters (Revised February 2006), IBR approved for § 60.107a(d).

(c) American Hospital Association (AHA) Service, Inc., Post Office Box 92683, Chicago, Illinois 60675-2683.

(1) An Ounce of Prevention: Waste Reduction Strategies for Health Care Facilities. American Society for Health Care Environmental Services of the American Hospital Association. Chicago, Illinois. 1993. AHA Catalog No. 057007. ISBN 0-87258-673-5. IBR approved for §§ 60.35e and 60.55c.

(2) [Reserved]

(d) American National Standards Institute (ANSI), 25 West 43rd Street, Fourth Floor, New York, NY 10036-7417; phone: (212) 642-4980; email: *info@ansi.org*; website: *www.ansi.org*.

(1) ANSI No. C12.20-2010 American National Standard for Electricity Meters—0.2 and 0.5 Accuracy Classes (Approved August 31, 2010); IBR approved for §§ 60.5535(d); 60.5535a(d); 60.5860b(a).

(2) [Reserved]

(e) American Petroleum Institute (API), 200 Massachusetts Ave. NW, Suite 1100, Washington, DC 20001; phone: (202) 682-8000; website: *www.api.org*.

(1) API Publication 2517, Evaporation Loss from External Floating Roof Tanks, Second Edition, February 1980, IBR approved for §§ 60.111(i), 60.111a(f), and 60.116b(e).

(2) API Manual of Petroleum Measurement Standards, Chapter 14—Natural Gas Fluids Measurement, Section 1—Collecting and Handling of Natural Gas Samples for Custody Transfer, 7th Edition, May 2016, IBR approved for § 60.4415(a).

(3) API Manual of Petroleum Measurement Standards, Chapter 22—Testing Protocol, Section 2—Differential Pressure Flow Measurement Devices, First Edition, August 2005, IBR approved for § 60.107a(d).

(f) American Public Health Association, 1015 18th Street NW., Washington, DC 20036.

(1) "Standard Methods for the Examination of Water and Wastewater," 16th edition, 1985. Method 303F: "Determination of Mercury by the Cold Vapor Technique." Incorporated by reference for appendix A-8 to part 60, Method 29, §§ 9.2.3, 10.3, and 11.1.3.

(2) 2540 G. Total, Fixed, and Volatile Solids in Solid and Semisolid Samples, in Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998, IBR approved for § 60.154(b).

(g) American Society of Mechanical Engineers (ASME), Two Park Avenue, New York, NY 10016-5990; phone: (800) 843-2763; email: *CustomerCare@asme.org;* website: *www.asme.org.*

(1) ASME Interim Supplement 19.5 on Instruments and Apparatus: Application, Part II of Fluid Meters, 6th Edition (1971), IBR approved for §§ 60.58a(h), 60.58b(i), 60.1320(a), and 60.1810(a).

(2) ASME MFC-3M-2004, Measurement of Fluid Flow in Pipes Using Orifice, Nozzle, and Venturi, IBR approved for § 60.107a(d).

(3) ASME/ANSI MFC-4M-1986 (Reaffirmed 2008), Measurement of Gas Flow by Turbine Meters, IBR approved for § 60.107a(d).

(4) ASME/ANSI MFC-5M-1985 (Reaffirmed 2006), Measurement of Liquid Flow in Closed Conduits Using Transit-Time Ultrasonic Flowmeters, IBR approved for § 60.107a(d).

(5) ASME MFC-6M-1998 (Reaffirmed 2005), Measurement of Fluid Flow in Pipes Using Vortex Flowmeters, IBR approved for § 60.107a(d).

(6) ASME/ANSI MFC-7M-1987 (Reaffirmed 2006), Measurement of Gas Flow by Means of Critical Flow Venturi Nozzles, IBR approved for § 60.107a(d).

(7) ASME/ANSI MFC-9M-1988 (Reaffirmed 2006), Measurement of Liquid Flow in Closed Conduits by Weighing Method, IBR approved for § 60.107a(d).

(8) ASME MFC-11M-2006, Measurement of Fluid Flow by Means of Coriolis Mass Flowmeters, IBR approved for § 60.107a(d).

(9) ASME MFC-14M-2003, Measurement of Fluid Flow Using Small Bore Precision Orifice Meters, IBR approved for § 60.107a(d).

(10) ASME MFC-16-2007, Measurement of Liquid Flow in Closed Conduits with Electromagnetic Flowmeters, IBR approved for § 60.107a(d).

(11) ASME MFC-18M-2001, Measurement of Fluid Flow Using Variable Area Meters, IBR approved for § 60.107a(d).

(12) ASME MFC-22-2007, Measurement of Liquid by Turbine Flowmeters, IBR approved for § 60.107a(d).

(13) ASME PTC 4.1-1964 (Reaffirmed 1991), Power Test Codes: Test Code for Steam Generating Units (with 1968 and 1969 Addenda), IBR approved for §§ 60.46b, 60.58a(h), 60.58b(i), 60.1320(a), and 60.1810(a).

(14) ASME/ANSI PTC 19.10-1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus], Issued August 31, 1981; IBR approved for §§ 60.56c(b); 60.63(f); 60.106(e); 60.104a(d), (h), (i), and (j); 60.105a(b), (d), (f), and (g); 60.106a(a); 60.107a(a), (c), and (d); 60.275(e); 60.275a(e); 60.275b(e); tables 1

and 3 to subpart EEEE; tables 2 and 4 to subpart FFFF; table 2 to subpart JJJJ; §§ 60.285a(f); 60.396(a); 60.614a(b); 60.664a(b); 60.704(b); 60.704a(b); 60.2145(s) and (t); 60.2710(s) and (t); 60.2730(q); 60.4415(a); 60.4900(b); 60.5220(b); tables 1 and 2 to subpart LLLL; tables 2 and 3 to subpart MMMM; §§ 60.5406(c); 60.5406a(c); 60.5406b(c); 60.5407a(g); 60.5407b(g); 60.5413(b); 60.5413a(b) and (d); 60.5413b(d) and (d); 60.5413c(b) and (d).

(15) ASME PTC 22-2014, Gas Turbines: Performance Test Codes, (Issued December 31, 2014); IBR approved for §§ 60.5580; 60.5580a.

(16) ASME PTC 46-1996, Performance Test Code on Overall Plant Performance, (Issued October 15,1997); IBR approved for §§ 60.5580; 60.5580a.

(17) ASME QRO-1-1994, Standard for the Qualification and Certification of Resource Recovery Facility Operators, IBR approved for §§ 60.54b(a) and (b), 60.56a, 60.1185(a) and (c), and 60.1675(a) and (c).

(h) ASTM International, 100 Barr Harbor Drive, P.O. Box CB700, West Conshohocken, Pennsylvania 19428-2959; phone: (800) 262-1373; website: *www.astm.org.*

(1) ASTM A99-76, Standard Specification for Ferromanganese, IBR approved for § 60.261.

(2) ASTM A99-82 (Reapproved 1987), Standard Specification for Ferromanganese, IBR approved for § 60.261.

(3) ASTM A100-69, Standard Specification for Ferrosilicon, IBR approved for § 60.261.

(4) ASTM A100-74, Standard Specification for Ferrosilicon, IBR approved for § 60.261.

(5) ASTM A100-93, Standard Specification for Ferrosilicon, IBR approved for § 60.261.

(6) ASTM A101-73, Standard Specification for Ferrochromium, IBR approved for § 60.261.

(7) ASTM A101-93, Standard Specification for Ferrochromium, IBR approved for § 60.261.

(8) ASTM A482-76, Standard Specification for Ferrochromesilicon, IBR approved for § 60.261.

(9) ASTM A482-93, Standard Specification for Ferrochromesilicon, IBR approved for § 60.261.

(10) ASTM A483-64, Standard Specification for Silicomanganese, IBR approved for § 60.261.

(11) ASTM A483-74 (Reapproved 1988), Standard Specification for Silicomanganese, IBR approved for § 60.261.

(12) ASTM A495-76, Standard Specification for Calcium-Silicon and Calcium Manganese-Silicon, IBR approved for § 60.261.

(13) ASTM A495-94, Standard Specification for Calcium-Silicon and Calcium Manganese-Silicon, IBR approved for § 60.261.

(14) ASTM D86-78, Distillation of Petroleum Products, IBR approved for §§ 60.562-2(d), 60.593(d), 60.593a(d), 60.633(h).

(15) ASTM D86-82, Distillation of Petroleum Products, IBR approved for §§ 60.562-2(d), 60.593(d), 60.593a(d), 60.633(h).

(16) ASTM D86-90, Distillation of Petroleum Products, IBR approved for §§ 60.562-2(d), 60.593(d), 60.593a(d), 60.633(h).

(17) ASTM D86-93, Distillation of Petroleum Products, IBR approved for §§ 60.562-2(d), 60.593(d), 60.593a(d), 60.633(h).

(18) ASTM D86-95, Distillation of Petroleum Products, IBR approved for §§ 60.562-2(d), 60.593(d), 60.593a(d), 60.633(h).

(19) ASTM D86-96, Distillation of Petroleum Products, approved April 10, 1996; IBR approved for §§ 60.562-2(d). 60.593(d). 60.593a(d); 60.633(h); 60.5401(f); 60.5401a(f); 60.5402b(d); 60.5402c(d).

(20) ASTM D129-64, Standard Test Method for Sulfur in Petroleum Products (General Bomb Method), IBR approved for §§ 60.106(j) and appendix A-7 to part 60: Method 19, Section 12.5.2.2.3.

(21) ASTM D129-78, Standard Test Method for Sulfur in Petroleum Products (General Bomb Method), IBR approved for §§ 60.106(j) and appendix A-7 to part 60: Method 19, Section 12.5.2.2.3.

(22) ASTM D129-95, Standard Test Method for Sulfur in Petroleum Products (General Bomb Method), IBR approved for §§ 60.106(j) and appendix A-7 to part 60: Method 19, Section 12.5.2.2.3.

(23) ASTM D129-00, Standard Test Method for Sulfur in Petroleum Products (General Bomb Method), IBR approved for § 60.335(b).

(24) ASTM D129-00 (Reapproved 2005), Standard Test Method for Sulfur in Petroleum Products (General Bomb Method), IBR approved for § 60.4415(a).

(25) ASTM D240-76, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, IBR approved for §§ 60.46(c), 60.296(b), and appendix A-7 to part 60: Method 19, Section 12.5.2.2.3.

(26) ASTM D240-92, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, IBR approved for §§ 60.46(c), 60.296(b), and appendix A-7: Method 19, Section 12.5.2.2.3.

(27) ASTM D240-02 (Reapproved 2007), Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, (Approved May 1, 2007), IBR approved for § 60.107a(d).

(28) ASTM D240-19, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, approved November 1, 2019; IBR approved for § 60.485b(g).

(29) ASTM D270-65, Standard Method of Sampling Petroleum and Petroleum Products, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.2.1.

(30) ASTM D270-75, Standard Method of Sampling Petroleum and Petroleum Products, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.2.1.

(31) ASTM D323-82, Test Method for Vapor Pressure of Petroleum Products (Reid Method), IBR approved for §§ 60.111(l), 60.111a(g), 60.111b, and 60.116b(f).

(32) ASTM D323-94, Test Method for Vapor Pressure of Petroleum Products (Reid Method), IBR approved for §§ 60.111(l), 60.111a(g), 60.111b, and 60.116b(f).

(33) ASTM D388-77, Standard Specification for Classification of Coals by Rank, IBR approved for §§ 60.41, 60.45(f), 60.41Da, 60.41b, 60.41c, and 60.251.

(34) ASTM D388-90, Standard Specification for Classification of Coals by Rank, IBR approved for §§ 60.41, 60.45(f), 60.41Da, 60.41b, 60.41c, and 60.251.

(35) ASTM D388-91, Standard Specification for Classification of Coals by Rank, IBR approved for §§ 60.41, 60.45(f), 60.41Da, 60.41b, 60.41c, and 60.251.

(36) ASTM D388-95, Standard Specification for Classification of Coals by Rank, IBR approved for §§ 60.41, 60.45(f), 60.41Da, 60.41b, 60.41c, and 60.251.

(37) ASTM D388-98a, Standard Specification for Classification of Coals by Rank, IBR approved for §§ 60.41, 60.45(f), 60.41Da, 60.41b, 60.41c, and 60.251.

(38) ASTM D388-99 (Reapproved 2004)$^{\varepsilon 1}$(ASTM D388-99R04), Standard Classification of Coals by Rank, (Approved June 1, 2004); IBR approved for §§ 60.41; 60.45(f); 60.41Da; 60.41b; 60.41c; 60.251; 60.5580; 60.5580a.

(39) ASTM D396-78, Standard Specification for Fuel Oils, IBR approved for §§ 60.41b, 60.41c, 60.111(b), and 60.111a(b).

(40) ASTM D396-89, Standard Specification for Fuel Oils, IBR approved for §§ 60.41b, 60.41c, 60.111(b), and 60.111a(b).

(41) ASTM D396-90, Standard Specification for Fuel Oils, IBR approved for §§ 60.41b, 60.41c, 60.111(b), and 60.111a(b).

(42) ASTM D396-92, Standard Specification for Fuel Oils, IBR approved for §§ 60.41b, 60.41c, 60.111(b), and 60.111a(b).

(43) ASTM D396-98, Standard Specification for Fuel Oils, (Approved April 10, 1998); IBR approved for §§ 60.41b; 60.41c; 60.111(b); 60.111a(b); 60.5580; 60.5580a.

(44) ASTM D975-78, Standard Specification for Diesel Fuel Oils, IBR approved for §§ 60.111(b) and 60.111a(b).

(45) ASTM D975-96, Standard Specification for Diesel Fuel Oils, IBR approved for §§ 60.111(b) and 60.111a(b).

(46) ASTM D975-98a, Standard Specification for Diesel Fuel Oils, IBR approved for §§ 60.111(b) and 60.111a(b).

(47) ASTM D975-08a, Standard Specification for Diesel Fuel Oils, (Approved October 1, 2008); IBR approved for §§ 60.41b; 60.41c; 60.5580; 60.5580a.

(48) ASTM D1072-80, Standard Test Method for Total Sulfur in Fuel Gases, IBR approved for § 60.335(b).

(49) ASTM D1072-90 (Reapproved 1994), Standard Test Method for Total Sulfur in Fuel Gases, IBR approved for § 60.335(b).

(50) ASTM D1072-90 (Reapproved 1999), Standard Test Method for Total Sulfur in Fuel Gases, IBR approved for § 60.4415(a).

(51) ASTM D1137-53, Standard Method for Analysis of Natural Gases and Related Types of Gaseous Mixtures by the Mass Spectrometer, IBR approved for § 60.45(f).

(52) ASTM D1137-75, Standard Method for Analysis of Natural Gases and Related Types of Gaseous Mixtures by the Mass Spectrometer, IBR approved for § 60.45(f).

(53) ASTM D1193-77, Standard Specification for Reagent Water, IBR approved for appendix A-3 to part 60: Method 5, Section 7.1.3; Method 5E, Section 7.2.1; Method 5F, Section 7.2.1; appendix A-4 to part 60: Method 6, Section 7.1.1; Method 7, Section 7.1.1; Method 7C, Section 7.1.1; Method 7D, Section 7.1.1; Method 10A, Section 7.1.1; appendix A-5 to part 60: Method 11, Section 7.1.3; Method 12, Section 7.1.3; Method 13A, Section 7.1.2; appendix A-8 to part 60: Method 26, Section 7.1.2; Method 26A, Section 7.1.2; and Method 29, Section 7.2.2.

(54) ASTM D1193-91, Standard Specification for Reagent Water, IBR approved for appendix A-3 to part 60: Method 5, Section 7.1.3; Method 5E, Section 7.2.1; Method 5F, Section 7.2.1; appendix A-4 to part 60: Method 6, Section 7.1.1; Method 7, Section 7.1.1; Method 7C, Section 7.1.1; Method 7D, Section 7.1.1; Method 10A, Section 7.1.1; appendix A-5 to part 60: Method 11, Section 7.1.3; Method 12, Section 7.1.3; Method 13A, Section 7.1.2; appendix A-8 to part 60: Method 26, Section 7.1.2; Method 26A, Section 7.1.2; and Method 29, Section 7.2.2.

(55) ASTM D1266-87, Standard Test Method for Sulfur in Petroleum Products (Lamp Method), IBR approved for §§ 60.106(j) and 60.335(b).

(56) ASTM D1266-91, Standard Test Method for Sulfur in Petroleum Products (Lamp Method), IBR approved for §§ 60.106(j) and 60.335(b).

(57) ASTM D1266-98, Standard Test Method for Sulfur in Petroleum Products (Lamp Method), IBR approved for §§ 60.106(j) and 60.335(b).

(58) ASTM D1266-98 (Reapproved 2003)$^{\varepsilon,1}$ Standard Test Method for Sulfur in Petroleum Products (Lamp Method), IBR approved for § 60.4415(a).

(59) ASTM D1475-60 (Reapproved 1980), Standard Test Method for Density of Paint, Varnish Lacquer, and Related Products, IBR approved for § 60.435(d), appendix A-7 to part 60: Method 24, Section 6.1; and Method 24A, Sections 6.5 and 7.1.

(60) ASTM D1475-90, Standard Test Method for Density of Paint, Varnish Lacquer, and Related Products, IBR approved for § 60.435(d), appendix A-7 to part 60: Method 24, Section 6.1; and Method 24A, §§ 6.5 and 7.1.

(61) ASTM D1475-13, Standard Test Method for Density of Liquid Coatings, Inks, and Related Products, Approved November 1, 2013; IBR approved for § 60.393a(f).

(62) ASTM D1552-83, Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method), IBR approved for §§ 60.106(j), 60.335(b), and appendix A-7 to part 60: Method 19, Section 12.5.2.2.3.

(63) ASTM D1552-95, Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method), IBR approved for §§ 60.106(j), 60.335(b), and appendix A-7 to part 60: Method 19, Section 12.5.2.2.3.

(64) ASTM D1552-01, Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method), IBR approved for §§ 60.106(j), 60.335(b), and appendix A-7 to part 60: Method 19, Section 12.5.2.2.3.

(65) ASTM D1552-03, Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method), IBR approved for § 60.4415(a).

(66) ASTM D1826-77, Standard Test Method for Calorific Value of Gases in Natural Gas Range by Continuous Recording Calorimeter, IBR approved for §§ 60.45(f), 60.46(c), 60.296(b), and appendix A-7 to part 60: Method 19, Section 12.3.2.4.

(67) ASTM D1826-94, Standard Test Method for Calorific Value of Gases in Natural Gas Range by Continuous Recording Calorimeter, IBR approved for §§ 60.45(f), 60.46(c), 60.296(b), and appendix A-7 to part 60: Method 19, Section 12.3.2.4.

(68) ASTM D1826-94 (Reapproved 2003), Standard Test Method for Calorific (Heating) Value of Gases in Natural Gas Range by Continuous Recording Calorimeter, (Approved May 10, 2003), IBR approved for § 60.107a(d).

(69) ASTM D1835-87, Standard Specification for Liquefied Petroleum (LP) Gases, IBR approved for §§ 60.41Da, 60.41b, and 60.41c.

(70) ASTM D1835-91, Standard Specification for Liquefied Petroleum (LP) Gases, IBR approved for §§ 60.41Da, 60.41b, and 60.41c.

(71) ASTM D1835-97, Standard Specification for Liquefied Petroleum (LP) Gases, IBR approved for §§ 60.41Da, 60.41b, and 60.41c.

(72) ASTM D1835-03a, Standard Specification for Liquefied Petroleum (LP) Gases, IBR approved for §§ 60.41Da, 60.41b, and 60.41c.

(73) ASTM D1945-64, Standard Method for Analysis of Natural Gas by Gas Chromatography, IBR approved for § 60.45(f).

(74) ASTM D1945-76, Standard Method for Analysis of Natural Gas by Gas Chromatography, IBR approved for § 60.45(f).

(75) ASTM D1945-91, Standard Method for Analysis of Natural Gas by Gas Chromatography, IBR approved for § 60.45(f).

(76) ASTM D1945-96, Standard Method for Analysis of Natural Gas by Gas Chromatography, IBR approved for § 60.45(f).

(77) ASTM D1945-03 (Reapproved 2010), Standard Method for Analysis of Natural Gas by Gas Chromatography, approved January 1, 2010; IBR approved for §§ 60.107a(d); 60.5413(d); 60.5413a(d); 60.5413b(d); 60.5413c(d).

(78) ASTM D1945-14 (Reapproved 2019), Standard Test Method for Analysis of Natural Gas by Gas Chromatography, approved December 1, 2019; IBR approved for § 60.485b(g).

(79) ASTM D1946-77, Standard Method for Analysis of Reformed Gas by Gas Chromatography, IBR approved for §§ 60.18(f), 60.45(f), 60.564(f), 60.614(e), 60.664(e), and 60.704(d).

(80) ASTM D1946-90 (Reapproved 1994), Standard Method for Analysis of Reformed Gas by Gas Chromatography, IBR approved for §§ 60.18(f), 60.45(f), 60.564(f), 60.614(e), 60.664(e), and 60.704(d).

(81) ASTM D1946-90 (Reapproved 2006), Standard Method for Analysis of Reformed Gas by Gas Chromatography, (Approved June 1, 2006), IBR approved for § 60.107a(d).

(82) ASTM D2013-72, Standard Method of Preparing Coal Samples for Analysis, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.

(83) ASTM D2013-86, Standard Method of Preparing Coal Samples for Analysis, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.

(84) ASTM D2015-77 (Reapproved 1978), Standard Test Method for Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, IBR approved for §§ 60.45(f), 60.46(c), and appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.

(85) ASTM D2015-96, Standard Test Method for Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, IBR approved for §§ 60.45(f), 60.46(c), and appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.

(86) ASTM D2016-74, Standard Test Methods for Moisture Content of Wood, IBR approved for appendix A-8 to part 60: Method 28, Section 16.1.1.

(87) ASTM D2016-83, Standard Test Methods for Moisture Content of Wood, IBR approved for appendix A-8 to part 60: Method 28, Section 16.1.1.

(88) ASTM D2234-76, Standard Methods for Collection of a Gross Sample of Coal, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.1.

(89) ASTM D2234-96, Standard Methods for Collection of a Gross Sample of Coal, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.1.

(90) ASTM D2234-97b, Standard Methods for Collection of a Gross Sample of Coal, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.1.

(91) ASTM D2234-98, Standard Methods for Collection of a Gross Sample of Coal, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.1.

(92) ASTM D2369-81, Standard Test Method for Volatile Content of Coatings, IBR approved for appendix A-7 to part 60: Method 24, Section 6.2.

(93) ASTM D2369-87, Standard Test Method for Volatile Content of Coatings, IBR approved for appendix A-7 to part 60: Method 24, Section 6.2.

(94) ASTM D2369-90, Standard Test Method for Volatile Content of Coatings, IBR approved for appendix A-7 to part 60: Method 24, Section 6.2.

(95) ASTM D2369-92, Standard Test Method for Volatile Content of Coatings, IBR approved for appendix A-7 to part 60: Method 24, Section 6.2.

(96) ASTM D2369-93, Standard Test Method for Volatile Content of Coatings, IBR approved for appendix A-7 to part 60: Method 24, Section 6.2.

(97) ASTM D2369-95, Standard Test Method for Volatile Content of Coatings, IBR approved for appendix A-7 to part 60: Method 24, Section 6.2.

(98) ASTM D2369-10 (Reapproved 2015)e1, Standard Test Method for Volatile Content of Coatings, (Approved June 1, 2015); IBR approved for appendix A-7 to part 60: Method 24, Section 6.2.

(99) ASTM D2369-20, Standard Test Method for Volatile Content of Coatings, Approved June 1, 2020; IBR approved for §§ 60.393a(f); 60.723(b); 60.724(a); 60.725(b); 60.723a(b); 60.724a(a); 60.725a(b).

(100) ASTM D2382-76, Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), IBR approved for §§ 60.18(f), 60.485(g), 60.485a(g), 60.564(f), 60.614(e), 60.664(e), and 60.704(d).

(101) ASTM D2382-88, Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), IBR approved for §§ 60.18(f), 60.485(g), 60.485a(g), 60.564(f), 60.614(e), 60.664(e), and 60.704(d).

(102) ASTM D2504-67, Noncondensable Gases in C3 and Lighter Hydrocarbon Products by Gas Chromatography, IBR approved for §§ 60.485(g) and 60.485a(g).

(103) ASTM D2504-77, Noncondensable Gases in C3 and Lighter Hydrocarbon Products by Gas Chromatography, IBR approved for §§ 60.485(g) and 60.485a(g).

(104) ASTM D2504-88 (Reapproved 1993), Noncondensable Gases in C3 and Lighter Hydrocarbon Products by Gas Chromatography, IBR approved for §§ 60.485(g) and 60.485a(g).

(105) ASTM D2584-68(Reapproved 1985), Standard Test Method for Ignition Loss of Cured Reinforced Resins, IBR approved for § 60.685(c).

(106) ASTM D2584-94, Standard Test Method for Ignition Loss of Cured Reinforced Resins, IBR approved for § 60.685(c).

(107) ASTM D2597-94 (Reapproved 1999), Standard Test Method for Analysis of Demethanized Hydrocarbon Liquid Mixtures Containing Nitrogen and Carbon Dioxide by Gas Chromatography, IBR approved for § 60.335(b).

(108) ASTM D2622-87, Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry, IBR approved for §§ 60.106(j) and 60.335(b).

(109) ASTM D2622-94, Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry, IBR approved for §§ 60.106(j) and 60.335(b).

(110) ASTM D2622-98, Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry, IBR approved for §§ 60.106(j) and 60.335(b).

(111) ASTM D2622-05, Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry, IBR approved for § 60.4415(a).

(112) ASTM D2697-22, Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings, Approved July 1, 2022; IBR approved for §§ 60.393a(g); 60.723(b); 60.724(a); 60.725(b); 60.723a(b); 60.724a(a); 60.725a(b).

(113) ASTM D2879-83, Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, approved 1983; IBR approved for §§ 60.111b(f); 60.116b(e) and (f); 60.485(e); 60.485a(e); 60.5403b(d); 60.5406c(d).

(114) ASTM D2879-96, Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, approved 1996; IBR approved for §§ 60.111b(f); 60.116b(e) and (f); 60.485(e); 60.485a(e); 60.5403b(d); 60.5406c(d).

(115) ASTM D2879-97, Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, approved 1997; IBR approved for §§ 60.111b(f); 60.116b(e) and (f); 60.485(e); 60.485a(e); 60.5403b(d); 60.5406c(d).

(116) ASTM D2879-23, Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, approved December 1, 2019; IBR approved for § 60.485b(e).

(117) ASTM D2880-78, Standard Specification for Gas Turbine Fuel Oils, IBR approved for §§ 60.111(b), 60.111a(b), and 60.335(d).

(118) ASTM D2880-96, Standard Specification for Gas Turbine Fuel Oils, IBR approved for §§ 60.111(b), 60.111a(b), and 60.335(d).

(119) ASTM D2908-74, Standard Practice for Measuring Volatile Organic Matter in Water by Aqueous-Injection Gas Chromatography, IBR approved for § 60.564(j).

(120) ASTM D2908-91, Standard Practice for Measuring Volatile Organic Matter in Water by Aqueous-Injection Gas Chromatography, IBR approved for § 60.564(j).

(121) ASTM D2986-71, Standard Method for Evaluation of Air, Assay Media by the Monodisperse DOP (Dioctyl Phthalate) Smoke Test, IBR approved for appendix A-3 to part 60: Method 5, Section 7.1.1; appendix A-5 to part 60: Method 12, Section 7.1.1; and Method 13A, Section 7.1.1.2.

(122) ASTM D2986-78, Standard Method for Evaluation of Air, Assay Media by the Monodisperse DOP (Dioctyl Phthalate) Smoke Test, IBR approved for appendix A-3 to part 60: Method 5, Section 7.1.1; appendix A-5 to part 60: Method 12, Section 7.1.1; and Method 13A, Section 7.1.1.2.

(123) ASTM D2986-95a, Standard Method for Evaluation of Air, AssaMedia by the Monodisperse DOP (Dioctyl Phthalate) Smoke Test, IBR approved for appendix A-3 to part 60: Method 5, Section 7.1.1; appendix A-5 to part 60: Method 12, Section 7.1.1; and Method 13A, Section 7.1.1.2.

(124) ASTM D3173-73, Standard Test Method for Moisture in the Analysis Sample of Coal and Coke, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.

(125) ASTM D3173-87, Standard Test Method for Moisture in the Analysis Sample of Coal and Coke, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.

(126) ASTM D3176-74, Standard Method for Ultimate Analysis of Coal and Coke, IBR approved for § 60.45(f)(5)(i) and appendix A-7 to part 60: Method 19, Section 12.3.2.3.

(127) ASTM D3176-89, Standard Method for Ultimate Analysis of Coal and Coke, IBR approved for § 60.45(f)(5)(i) and appendix A-7 to part 60: Method 19, Section 12.3.2.3.

(128) ASTM D3177-75, Standard Test Method for Total Sulfur in the Analysis Sample of Coal and Coke, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.

(129) ASTM D3177-89, Standard Test Method for Total Sulfur in the Analysis Sample of Coal and Coke, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.

(130) ASTM D3178-73 (Reapproved 1979), Standard Test Methods for Carbon and Hydrogen in the Analysis Sample of Coal and Coke, IBR approved for § 60.45(f).

(131) ASTM D3178-89, Standard Test Methods for Carbon and Hydrogen in the Analysis Sample of Coal and Coke, IBR approved for § 60.45(f).

(132) ASTM D3246-81, Standard Test Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry, IBR approved for § 60.335(b).

(133) ASTM D3246-92, Standard Test Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry, IBR approved for § 60.335(b).

(134) ASTM D3246-96, Standard Test Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry, IBR approved for § 60.335(b).

(135) ASTM D3246-05, Standard Test Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry, IBR approved for § 60.4415(a)(1).

(136) ASTM D3270-73T, Standard Test Methods for Analysis for Fluoride Content of the Atmosphere and Plant Tissues (Semiautomated Method), IBR approved for appendix A-5 to part 60: Method 13A, Section 16.1.

(137) ASTM D3270-80, Standard Test Methods for Analysis for Fluoride Content of the Atmosphere and Plant Tissues (Semiautomated Method), IBR approved for appendix A-5 to part 60: Method 13A, Section 16.1.

(138) ASTM D3270-91, Standard Test Methods for Analysis for Fluoride Content of the Atmosphere and Plant Tissues (Semiautomated Method), IBR approved for appendix A-5 to part 60: Method 13A, Section 16.1.

(139) ASTM D3270-95, Standard Test Methods for Analysis for Fluoride Content of the Atmosphere and Plant Tissues (Semiautomated Method), IBR approved for appendix A-5 to part 60: Method 13A, Section 16.1.

(140) ASTM D3286-85, Standard Test Method for Gross Calorific Value of Coal and Coke by the Isoperibol Bomb Calorimeter, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.

(141) ASTM D3286-96, Standard Test Method for Gross Calorific Value of Coal and Coke by the Isoperibol Bomb Calorimeter, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.

(142) ASTM D3370-76, Standard Practices for Sampling Water, IBR approved for § 60.564(j).

(143) ASTM D3370-95a, Standard Practices for Sampling Water, IBR approved for § 60.564(j).

(144) ASTM D3588-98 (Reapproved 2003), Standard Practice for Calculating Heat Value, Compressibility Factor, and Relative Density of Gaseous Fuels, approved May 10, 2003; IBR approved for §§ 60.107a(d); 60.5413(d); 60.5413a(d); 60.5413b(d); 60.5413c(d).

(145) ASTM D3699-08, Standard Specification for Kerosine, including Appendix X1, (Approved September 1, 2008); IBR approved for §§ 60.41b; 60.41c; 60.5580; 60.5580a.

(146) ASTM D3792-79, Standard Test Method for Water Content of Water-Reducible Paints by Direct Injection into a Gas Chromatograph, IBR approved for appendix A-7 to part 60: Method 24, Section 6.3.

(147) ASTM D3792-91, Standard Test Method for Water Content of Water-Reducible Paints by Direct Injection into a Gas Chromatograph, IBR approved for appendix A-7 to part 60: Method 24, Section 6.3.

(148) ASTM D4017-81, Standard Test Method for Water in Paints and Paint Materials by the Karl Fischer Titration Method, IBR approved for appendix A-7 to part 60: Method 24, Section 6.4.

(149) ASTM D4017-90, Standard Test Method for Water in Paints and Paint Materials by the Karl Fischer Titration Method, IBR approved for appendix A-7 to part 60: Method 24, Section 6.4.

(150) ASTM D4017-96a, Standard Test Method for Water in Paints and Paint Materials by the Karl Fischer Titration Method, IBR approved for appendix A-7 to part 60: Method 24, Section 6.4.

(151) ASTM D4057-81, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.2.3.

(152) ASTM D4057-95, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.2.3.

(153) ASTM D4057-95 (Reapproved 2000), Standard Practice for Manual Sampling of Petroleum and Petroleum Products, IBR approved for § 60.4415(a).

(154) ASTM D4084-82, Standard Test Method for Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method), IBR approved for § 60.334(h).

(155) ASTM D4084-94, Standard Test Method for Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method), IBR approved for § 60.334(h).

(156) ASTM D4084-05, Standard Test Method for Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method), IBR approved for §§ 60.4360 and 60.4415(a).

(157) ASTM D4177-95, Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.2.1.

(158) ASTM D4177-95 (Reapproved 2000), Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, IBR approved for § 60.4415(a).

(159) ASTM D4239-85, Standard Test Methods for Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.

(160) ASTM D4239-94, Standard Test Methods for Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.

(161) ASTM D4239-97, Standard Test Methods for Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.

(162) ASTM D4294-02, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, IBR approved for § 60.335(b).

(163) ASTM D4294-03, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, IBR approved for § 60.4415(a).

(164) ASTM D4442-84, Standard Test Methods for Direct Moisture Content Measurement in Wood and Wood-base Materials, IBR approved for appendix A-8 to part 60: Method 28, Section 16.1.1.

(165) ASTM D4442-92, Standard Test Methods for Direct Moisture Content Measurement in Wood and Wood-base Materials, IBR approved for appendix A-8 to part 60: Method 28, Section 16.1.1.

(166) ASTM D4444-92, Standard Test Methods for Use and Calibration of Hand-Held Moisture Meters, IBR approved for appendix A-8 to part 60: Method 28, Section 16.1.1.

(167) ASTM D4457-85 (Reapproved 1991), Test Method for Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings by Direct Injection into a Gas Chromatograph, IBR approved for appendix A-7 to part 60: Method 24, Section 6.5.

(168) ASTM D4468-85 (Reapproved 2000), Standard Test Method for Total Sulfur in Gaseous Fuels by Hydrogenolysis and Rateometric Colorimetry, IBR approved for §§ 60.335(b) and 60.4415(a).

(169) ASTM D4468-85 (Reapproved 2006), Standard Test Method for Total Sulfur in Gaseous Fuels by Hydrogenolysis and Rateometric Colorimetry, (Approved June 1, 2006), IBR approved for § 60.107a(e).

(170) ASTM D4629-02, Standard Test Method for Trace Nitrogen in Liquid Petroleum Hydrocarbons by Syringe/Inlet Oxidative Combustion and Chemiluminescence Detection, IBR approved for §§ 60.49b(e) and 60.335(b).

(171) ASTM D4809-95, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method), IBR approved for §§ 60.18(f), 60.485(g), 60.485a(g), 60.564(f), 60.614(d), 60.664(e), and 60.704(d).

(172) ASTM D4809-06, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method), (Approved December 1, 2006), IBR approved for § 60.107a(d).

(173) ASTM D4809-18, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method), approved July 1, 2018; IBR approved for § 60.485b(g).

(174) ASTM D4810-88 (Reapproved 1999), Standard Test Method for Hydrogen Sulfide in Natural Gas Using Length of Stain Detector Tubes, IBR approved for §§ 60.4360 and 60.4415(a).

(175) ASTM D4840-99(2018)e1 Standard Guide for Sample Chain-of-Custody Procedures, approved August 2018; IBR approved for Appendix A-7: Method 23.

(176) ASTM D4891-89 (Reapproved 2006), Standard Test Method for Heating Value of Gases in Natural Gas Range by Stoichiometric Combustion, approved June 1, 2006; IBR approved for §§ 60.107a(d); 60.5413(d); 60.5413a(d); 60.5413b(d); 60.5413c(d).

(177) ASTM D5066-91, Standard Test Method for Determination of the Transfer Efficiency Under Production Conditions for Spray Application of Automotive Paints—Weight Basis, Approved June 1, 2017; IBR approved for § 60.393a(h).

(178) ASTM D5087-02 (Reapproved 2021), Standard Test Method for Determining Amount of Volatile Organic Compound (VOC) Released from Solventborne Automotive Coatings and Available for Removal in a VOC Control Device (Abatement), Approved February 1, 2021; IBR approved for § 60.397a(e); appendix A to subpart MMa.

(179) ASTM D5287-97 (Reapproved 2002), Standard Practice for Automatic Sampling of Gaseous Fuels, IBR approved for § 60.4415(a).

(180) ASTM D5403-93, Standard Test Methods for Volatile Content of Radiation Curable Materials, IBR approved for appendix A-7 to part 60: Method 24, Section 6.6.

(181) ASTM D5453-00, Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Motor Fuels and Oils by Ultraviolet Fluorescence, IBR approved for § 60.335(b).

(182) ASTM D5453-05, Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Motor Fuels and Oils by Ultraviolet Fluorescence, IBR approved for § 60.4415(a).

(183) ASTM D5504-01, Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence, IBR approved for §§ 60.334(h) and 60.4360.

(184) ASTM D5504-08, Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence, (Approved June 15, 2008), IBR approved for §§ 60.107a(e) and 60.5413(d).

(185) ASTM D5623-19, Standard Test Method for Sulfur Compounds in Light Petroleum Liquids by Gas Chromatography and Sulfur Selective Detection, (Approved July 1, 2019); IBR approved for § 60.4415(a).

(186) ASTM D5762-02, Standard Test Method for Nitrogen in Petroleum and Petroleum Products by Boat-Inlet Chemiluminescence, IBR approved for § 60.335(b).

(187) ASTM D5865-98, Standard Test Method for Gross Calorific Value of Coal and Coke, IBR approved for §§ 60.45(f) and 60.46(c), and appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.

(188) ASTM D5865-10, Standard Test Method for Gross Calorific Value of Coal and Coke, (Approved January 1, 2010), IBR approved for §§ 60.45(f), 60.46(c), and appendix A-7 to part 60: Method 19, section 12.5.2.1.3.

(189) ASTM D5965-02 (Reapproved 2013), Standard Test Methods for Specific Gravity of Coating Powders, Approved June 1, 2013; IBR approved for § 60.393a(f).

(190) ASTM D6093-97 (Reapproved 2016), Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer, Approved December 1, 2016; IBR approved for §§ 60.393a(g); 60.723(b); 60.724(a); 60.725(b); 60.723a(b); 60.724a(a); 60.725a(b).

(191) ASTM D6216-20, Standard Practice for Opacity Monitor Manufacturers to Certify Conformance with Design and Performance Specifications, approved September 1, 2020; IBR approved for appendix B to part 60.

(192) ASTM D6228-98, Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Flame Photometric Detection, IBR approved for § 60.334(h).

(193) ASTM D6228-98 (Reapproved 2003), Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Flame Photometric Detection, IBR approved for §§ 60.4360 and 60.4415.

(194) ASTM D6266-00a (Reapproved 2017), Standard Test Method for Determining the Amount of Volatile Organic Compound (VOC) Released From Waterborne Automotive Coatings and Available for Removal in a VOC Control Device (Abatement), Approved July 1, 2017; IBR approved for § 60.397a(e).

(195) ASTM D6348-03, Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, (Approved October 1, 2003), IBR approved for § 60.73a(b), table 7 to subpart IIII, table 2 to subpart JJJJ, and § 60.4245(d).

(196) ASTM D6348-12e1, Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, approved February 1, 2012; IBR approved for § 60.5413c(b).

(197) ASTM D6366-99, Standard Test Method for Total Trace Nitrogen and Its Derivatives in Liquid Aromatic Hydrocarbons by Oxidative Combustion and Electrochemical Detection, IBR approved for § 60.335(b)(9).

(198) ASTM D6377-20, Standard Test Method for Determination of Vapor Pressure of Crude Oil: $VPCR_X$ (Expansion Method), (Approved June 1, 2020); IBR approved for § 60.113c.

(199) ASTM-D6378-22, Standard Test Method for Determination of Vapor Pressure (VPX) of Petroleum Products, Hydrocarbons, and Hydrocarbon-Oxygenate Mixtures (Triple Expansion Method), (Approved July 1, 2022); IBR approved for § 60.113c.

(200) ASTM D6420-99 (Reapproved 2004), Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry, (Approved October 1, 2004), IBR approved for § 60.107a(d) and table 2 to subpart JJJJ.

(201) ASTM D6420-18, Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry, approved November 1, 2018, IBR approved for §§ 60.485(g); 60.485a(g); 60.485b(g); 60.611a; 60.614(b) and (e); 60.614a(b) and (e), 60.664(b) and (e); 60.664a(b) and (f); 60.700(c); 60.704(b) (d), and (h); 60.705(l); 60.704a(b) and (f).

(202) ASTM D6522-00, Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers, IBR approved for § 60.335(a).

(203) ASTM D6522-00 (Reapproved 2005), Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers, (Approved October 1, 2005), IBR approved for table 2 to subpart JJJJ, §§ 60.5413(b) and (d), and 60.5413a(b).

(204) ASTM D6522-11 Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers (Approved December 1, 2011), IBR approved for § 60.37f(a), 60.766(a).

(205) ASTM D6522-20, Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers, approved June 1, 2020; IBR approved for §§ 60.5413b(b); 60.5413c(b).

(206) ASTM D6667-01, Standard Test Method for Determination of Total Volatile Sulfur in Gaseous Hydrocarbons and Liquefied Petroleum Gases by Ultraviolet Fluorescence, IBR approved for § 60.335(b).

(207) ASTM D6667-04, Standard Test Method for Determination of Total Volatile Sulfur in Gaseous Hydrocarbons and Liquefied Petroleum Gases by Ultraviolet Fluorescence, IBR approved for § 60.4415(a).

(208) ASTM D6751-11b, Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels, including Appendices X1 through X3, (Approved July 15, 2011), IBR approved for §§ 60.41b, 60.41c, 60.5580, and 60.5580a.

(209) ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), IBR approved for § 60.56c(b) and appendix B to part 60: Performance Specification 12A, Section 8.6.2.

(210) ASTM D6784-02 (Reapproved 2008), Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), approved April 1, 2008; IBR approved for § 60.56c(b).

(211) ASTM D6784-16, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), approved March 1, 2016; IBR approved for appendix B to part 60.

(212) ASTM D6911-15 Standard Guide for Packaging and Shipping Environmental Samples for Laboratory Analysis, approved January 15, 2015; IBR approved for Appendix A-7: Method 23; Appendix A-8: Method 30B.

(213) ASTM D7039-15a, Standard Test Method for Sulfur in Gasoline, Diesel Fuel, Jet Fuel, Kerosine, biodiesel, Biodiesel Blends, and Gasoline-Ethanol Blends by Monochromatic Wavelength Dispersive X-ray Fluorescence Spectrometry, (Approved July 1, 2015); IBR approved for § 60.4415(a).

(214) ASTM D7467-10, Standard Specification for Diesel Fuel Oil, Biodiesel Blend (B6 to B20), including Appendices X1 through X3, (Approved August 1, 2010), IBR approved for §§ 60.41b, 60.41c, 60.5580, and 60.5580a.

(215) ASTM D7520-16, Standard Test Method for Determining the Opacity of a Plume in the Outdoor Ambient Atmosphere, approved April 1, 2016; IBR approved for §§ 60.123(c)(6); 60.123(c)(6)(i); 60.123(c)(6)(ii); 60.123(c)(6)(v); 60.123a(c)(6)(ii); 60.123a(c)(6)(ii)(A); 60.123a(c)(6)(ii)(B); 60.123a(c)(6)(ii)(E); 60.271(k); 60.272(a) and (b); 60.273(c) and (d); 60.274(h); 60.275(e); 60.276(c); 60.271a; 60.272a(a) and (b); 60.273a(c) and (d); 60.274a(h); 60.275a(e); 60.276a(f); 60.271b; 60.272b(a) and (b); 60.273b(c) and (d); 60.274b(h); 60.275b(e); 60.276b(f); 60.374a(d).

(216) ASTM E168-67, General Techniques of Infrared Quantitative Analysis, IBR approved for §§ 60.485a(d), 60.593(b), 60.593a(b), and 60.632(f).

(217) ASTM E168-77, General Techniques of Infrared Quantitative Analysis, IBR approved for §§ 60.485a(d), 60.593(b), 60.593a(b), and 60.632(f).

(218) ASTM E168-92, General Techniques of Infrared Quantitative Analysis, IBR approved for §§ 60.485a(d), 60.593(b), 60.593a(b), 60.632(f), 60.5400, 60.5400a(f).

(219) ASTM E168-16 (Reapproved 2023), Standard Practices for General Techniques of Infrared Quantitative Analysis, approved January 1, 2023; IBR approved for § 60.485b(d).

(220) ASTM E169-63, General Techniques of Ultraviolet Quantitative Analysis, IBR approved for §§ 60.485a(d), 60.593(b), 60.593a(b), and 60.632(f) .

(221) ASTM E169-77, General Techniques of Ultraviolet Quantitative Analysis, IBR approved for §§ 60.485a(d), 60.593(b), and 60.593a(b), 60.632(f).

(222) ASTM E169-93, General Techniques of Ultraviolet Quantitative Analysis, (Approved May 15, 1993), IBR approved for §§ 60.485a(d), 60.593(b), 60.593a(b), 60.632(f), 60.5400(f), and 60.5400a(f).

(223) ASTM E169-16 (Reapproved 2022), Standard Practices for General Techniques of Ultraviolet-Visible Quantitative Analysis, approved November 1, 2022; IBR approved for § 60.485b(d).

(224) ASTM E260-73, General Gas Chromatography Procedures, IBR approved for §§ 60.485a(d), 60.593(b), 60.593a(b), and 60.632(f).

(225) ASTM E260-91, General Gas Chromatography Procedures, (IBR approved for §§ 60.485a(d), 60.593(b), 60.593a(b), and 60.632(f).

(226) ASTM E260-96, General Gas Chromatography Procedures, approved April 10, 1996; IBR approved for §§ 60.485a(d), 60.593(b), 60.593a(b), 60.632(f), 60.5400(f), 60.5400a(f), 60.5406(b), 60.5406a(b)(3), 60.5400b(a)(2), 60.5401b(a)(2), 60.5406b(b)(3), 60.5400c(a), and 60.5401c(a).

(227) ASTM E260-96 (Reapproved 2019), Standard Practice for Packed Column Gas Chromatography, approved September 1, 2029; IBR approved for § 60.485b(d).

(228) ASTM E617-13, Standard Specification for Laboratory Weights and Precision Mass Standards, approved May 1, 2013, IBR approved for appendix A-3: Methods 4, 5, 5H, 5I, and appendix A-8: Method 29.

(229) ASTM E871-82 (Reapproved 2013), Standard Test Method for Moisture Analysis of Particulate Wood Fuels, (Approved August 15, 2013), IBR approved for appendix A-8: method 28R.

(230) ASTM E1584-11, Standard Test Method for Assay of Nitric Acid, (Approved August 1, 2011), IBR approved for § 60.73a(c).

(231) ASTM E2515-11, Standard Test Method for Determination of Particulate Matter Emissions Collected by a Dilution Tunnel, (Approved November 1, 2011), IBR approved for § 60.534 and § 60.5476.

(232) ASTM E2618-13 Standard Test Method for Measurement of Particulate Matter Emissions and Heating Efficiency of Outdoor Solid Fuel-Fired Hydronic Heating Appliances, (Approved September 1, 2013), IBR approved for § 60.5476.

(233) ASTM E2779-10, Standard Test Method for Determining Particulate Matter Emissions from Pellet Heaters, (Approved October 1, 2010), IBR approved for § 60.534.

(234) ASTM E2780-10, Standard Test Method for Determining Particulate Matter Emissions from Wood Heaters, (Approved October 1, 2010), IBR approved for appendix A: method 28R.

(235) ASTM UOP539-97, Refinery Gas Analysis by Gas Chromatography, (Copyright 1997), IBR approved for § 60.107a(d).

(i) Association of Official Analytical Chemists, 1111 North 19th Street, Suite 210, Arlington, VA 22209; phone: (301) 927-7077; website: *https://www.aoac.org/*.

(1) AOAC Method 9, Official Methods of Analysis of the Association of Official Analytical Chemists (AOAC), 11th edition, 1970, pp. 11-12, IBR approved for §§ 60.204(b), 60.214(b), 60.224(b), and 60.234(b).

(2) [Reserved]

(j) CSA Group (CSA) (formerly Canadian Standards Association), 178 Rexdale Boulevard, Toronto, Ontario, Canada; phone: (800) 463-6727; website: *https://shop.csa.ca*.

(1) CSA B415.1-10, Performance Testing of Solid-fuel-burning Heating Appliances, (March 2010), IBR approved for §§ 60.534; 60.5476.

(2) [Reserved]

(k) U.S. Environmental Protection Agency (EPA), 1200 Pennsylvania Avenue NW, Washington, DC 20460; phone: (202) 272-0167; website: *www.epa.gov/aboutepa/forms/contact-epa*.

(1) EPA-453/R-08-002, Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Primer-Surfacer and Topcoat Operations, September 2008, Office of Air Quality Planning and Standards (OAQPS); IBR approved for §§ 60.393a(e) and (h); 60.395a(k); 60.397a(e); appendix A to subpart MMa.

(2) EPA-454/B-08-002, Quality Assurance Handbook for Air Pollution Measurement Systems; Volume IV: Meteorological Measurements, Version 2.0 (Final), March 2008; IBR approved for appendix K to this part.

(3) EPA-454/R-98-015, Office of Air Quality Planning and Standards (OAQPS), Fabric Filter Bag Leak Detection Guidance, September 1997; IBR approved for §§ 60.124(f); 60.124a(f); 60.273(e); 60.273a(e); 60.273b(e); 60.373a(b); 60.2145(r); 60.2710(r); 60.4905(b); 60.5225(b). (Available from: *https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=2000D5T6.pdf*).

(4) EPA-600/R-12/531, EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards, May 2012; IBR approved for §§ 60.5413(d); 60.5413a(d); 60.5413b(d); 60.5413c(d).

(5) In EPA Publication No. SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (Available from: *www.epa.gov/hw-sw846/sw-846-compendium*):

(i) SW-846-6010D, Inductively Coupled Plasma-Optical Emission Spectrometry, Revision 5, July 2018; IBR approved for appendix A-5 to this part.

(ii) SW-846-6020B, Inductively Coupled Plasma-Mass Spectrometry, Revision 2, July 2014; IBR approved for appendix A-5 to this part.

(l) European Standards (EN), European Committee for Standardization, Management Centre, Avenue Marnix 17, B-1000 Brussels, Belgium; phone: + 32 2 550 08 11; website: *https://www.en-standard.eu*.

(1) DIN EN 303-5:2012E (EN 303-5), Heating boilers—Part 5: Heating boilers for solid fuels, manually and automatically stoked, nominal heat output of up to 500 kW—Terminology, requirements, testing and marking, (October 2012), IBR approved for § 60.5476.

(2) [Reserved]

(m) GPA Midstream Association, 6060 American Plaza, Suite 700, Tulsa, OK 74135; phone: (918) 493-3872; website: *www.gpamidstream.org*.

(1) GPA Midstream Standard 2140-17 (GPA 2140-17), Liquefied Petroleum Gas Specifications and Test Methods, (Revised 2017), IBR approved for § 60.4415(a).

(2) GPA Midstream Standard 2166-17 (GPA 2166-17), Obtaining Natural Gas Samples for Analysis by Gas Chromatography, (Reaffirmed 2017), IBR approved for § 60.4415(a).

(3) Gas Processors Association Standard 2172-09, Calculation of Gross Heating Value, Relative Density, Compressibility and Theoretical Hydrocarbon Liquid Content for Natural Gas Mixtures for Custody Transfer (2009), IBR approved for § 60.107a(d).

(4) GPA Standard 2174-14 (GPA 2174-14), Obtaining Liquid Hydrocarbon Samples for Analysis by Gas Chromatography, (Revised 2014), IBR approved for § 60.4415(a).

(5) GPA Standard 2261-19 (GPA 2261-19), Analysis for Natural Gas and Similar Gaseous Mixtures by Gas Chromatography, (Revised 2019), IBR approved for § 60.4415(a).

(6) Gas Processors Association Standard 2377-86, Test for Hydrogen Sulfide and Carbon Dioxide in Natural Gas Using Length of Stain Tubes, 1986 Revision, IBR approved for §§ 60.105(b), 60.107a(b), 60.334(h), 60.4360, and 60.4415(a).

(n) International Organization for Standardization (ISO), 1, ch. de la Voie-Creuse, Case postale 56, CH-1211 Geneva 20, Switzerland; phone: + 41 22 749 01 11; website: *www.iso.org*.

(1) ISO 8178-4: 1996(E), Reciprocating Internal Combustion Engines—Exhaust Emission Measurement—part 4: Test Cycles for Different Engine Applications, IBR approved for § 60.4241(b).

(2) ISO 2314:2009(E), Gas turbines-Acceptance tests, Third edition (December 15, 2009), IBR approved for §§ 60.5580; 60.5580a.

(3) ISO 8316: Measurement of Liquid Flow in Closed Conduits—Method by Collection of the Liquid in a Volumetric Tank (1987-10-01)—First Edition, IBR approved for § 60.107a(d).

(4) ISO 10715:1997(E), Natural gas—Sampling guidelines, (First Edition, June 1, 1997), IBR approved for § 60.4415(a).

(o) National Technical Information Services (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161.

(1) OMB Bulletin No. 93-17: Revised Statistical Definitions for Metropolitan Areas. Office of Management and Budget, June 30, 1993. NTIS No. PB 93-192-664. IBR approved for § 60.31e.

(2) [Reserved]

(p) North American Electric Reliability Corporation, 1325 G Street NW., Suite 600, Washington, DC 20005-3801, *http://www.nerc.com.*

(1) North American Electric Reliability Corporation Reliability Standard EOP-002-3, Capacity and Energy Emergencies, updated November 19, 2012, IBR approved for §§ 60.4211(f) and 60.4243(d). Also available online: *http://www.nerc.com/files/EOP-002-3__1.pdf.*

(2) [Reserved]

(q) Pacific Lumber Inspection Bureau (formerly West Coast Lumber Inspection Bureau), 1010 South 336th Street #210, Federal Way, WA 98003; phone: (253) 835.3344; website: *www.plib.org*.

(1) West Coast Lumber Standard Grading Rules No. 16, pages 5-21, 90 and 91, September 3, 1970, revised 1984, IBR approved for appendix A-8 to part 60.

(2) [Reserved]

(r) Technical Association of the Pulp and Paper Industry (TAPPI), 15 Technology Parkway South, Suite 115, Peachtree Corners, GA 30092; phone (800) 332-8686; website: *www.tappi.org.*

(1) TAPPI Method T 624 cm-11, (Copyright 2011), IBR approved, for §§ 60.285(d) and 60.285a(d).

(2) [Reserved]

(s) Underwriter's Laboratories, Inc. (UL), 333 Pfingsten Road, Northbrook, IL 60062.

(1) UL 103, Sixth Edition revised as of September 3, 1986, Standard for Chimneys, Factory-built, Residential Type and Building Heating Appliance, IBR approved for appendix A-8 to part 60.

(2) [Reserved]

(t) Water Pollution Control Federation (WPCF), 2626 Pennsylvania Avenue NW., Washington, DC 20037.

(1) Method 209A, Total Residue Dried at 103-105 °C, in Standard Methods for the Examination of Water and Wastewater, 15th Edition, 1980, IBR approved for § 60.683(b).

(2) [Reserved]

Editorial Note

Editorial Note: For Federal Register citations affecting § 60.17, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at www.govinfo.gov.

§ 60.18 General control device and work practice requirements.

(a) *Introduction.*

(1) This section contains requirements for control devices used to comply with applicable subparts of 40 CFR parts 60 and 61. The requirements are placed here for administrative convenience and apply only to facilities covered by subparts referring to this section.

(2) This section also contains requirements for an alternative work practice used to identify leaking equipment. This alternative work practice is placed here for administrative convenience and is available to all subparts in 40 CFR parts 60, 61, 63, and 65 that require monitoring of equipment with a 40 CFR part 60, appendix A-7, Method 21 monitor.

(b) *Flares.* Paragraphs (c) through (f) apply to flares.

(c)

(1) Flares shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

(2) Flares shall be operated with a flame present at all times, as determined by the methods specified in paragraph (f).

(3) An owner/operator has the choice of adhering to either the heat content specifications in paragraph (c)(3)(ii) of this section and the maximum tip velocity specifications in paragraph (c)(4) of this section, or adhering to the requirements in paragraph (c)(3)(i) of this section.

(i)

(A) Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0 percent (by volume), or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity, V_{max}, as determined by the following equation:

$V_{max} = (X_{H2} - K_1) * K_2$

Where:

V_{max} = Maximum permitted velocity, m/sec.

K_1 = Constant, 6.0 volume-percent hydrogen.

K_2 = Constant, 3.9(m/sec)/volume-percent hydrogen.

X_{H2} = The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946-77. (Incorporated by reference as specified in § 60.17).

(B) The actual exit velocity of a flare shall be determined by the method specified in paragraph (f)(4) of this section.

(ii) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in paragraph (f)(3) of this section.

(4)

(i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4) of this section, less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (c)(4) (ii) and (iii) of this section.

(ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

(iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), less than the velocity, V_{max}, as determined by the method specified in paragraph (f)(5), and less than 122 m/sec (400 ft/sec) are allowed.

(5) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity, V_{max}, as determined by the method specified in paragraph (f)(6).

(6) Flares used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.

(d) Owners or operators of flares used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices.

(e) Flares used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

(f)

(1) Method 22 of appendix A to this part shall be used to determine the compliance of flares with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.

(2) The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

(3) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \sum_{i=1}^{n} C_i H_i$$

where:

H_T = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C;

$$K = \text{Constant}, 1.740 \times 10^{-7} \left(\frac{1}{ppm}\right) \left(\frac{g\ mole}{scm}\right) \left(\frac{MJ}{kcal}\right)$$

where the standard temperature for $\left(\frac{g\ mole}{scm}\right)$ is 20°C;

C_i = Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-77 or 90 (Reapproved 1994) (Incorporated by reference as specified in § 60.17); and

H_i = Net heat of combustion of sample component i, kcal/g mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in § 60.17) if published values are not available or cannot be calculated.

(4) The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.

(5) The maximum permitted velocity, V_{max}, for flares complying with paragraph (c)(4)(iii) shall be determined by the following equation.

Log_{10} (V_{max}) = (H_T + 28.8)/31.7

V_{max} = Maximum permitted velocity, M/sec

28.8 = Constant

31.7 = Constant

H_T = The net heating value as determined in paragraph (f)(3).

(6) The maximum permitted velocity, V_{max}, for air-assisted flares shall be determined by the following equation.

V_{max} = 8.706 + 0.7084 (H_T)

V_{max} = Maximum permitted velocity, m/sec

8.706 = Constant

0.7084 = Constant

H_T = The net heating value as determined in paragraph (f)(3).

(g) *Alternative work practice for monitoring equipment for leaks.* Paragraphs (g), (h), and (i) of this section apply to all equipment for which the applicable subpart requires monitoring with a 40 CFR part 60, appendix A-7, Method 21 monitor, except for closed vent systems, equipment designated as leakless, and equipment identified in the applicable subpart as having no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background. An owner or operator may use an optical gas imaging instrument instead of a 40 CFR part 60, appendix A-7, Method 21 monitor. Requirements in the existing subparts that are specific to the Method 21 instrument do not apply under this section. All other requirements in the applicable subpart that are not addressed in paragraphs (g), (h), and (i) of this section apply to this standard. For example, equipment specification requirements, and non-Method 21 instrument recordkeeping and reporting requirements in the applicable subpart continue to apply. The terms defined in paragraphs (g)(1) through (5) of this section have meanings that are specific to the alternative work practice standard in paragraphs (g), (h), and (i) of this section.

(1) *Applicable subpart* means the subpart in 40 CFR parts 60, 61, 63, or 65 that requires monitoring of equipment with a 40 CFR part 60, appendix A-7, Method 21 monitor.

(2) *Equipment* means pumps, valves, pressure relief valves, compressors, open-ended lines, flanges, connectors, and other equipment covered by the applicable subpart that require monitoring with a 40 CFR part 60, appendix A-7, Method 21 monitor.

(3) *Imaging* means making visible emissions that may otherwise be invisible to the naked eye.

(4) *Optical gas imaging instrument* means an instrument that makes visible emissions that may otherwise be invisible to the naked eye.

(5) *Repair* means that equipment is adjusted, or otherwise altered, in order to eliminate a leak.

(6) *Leak* means:

(i) Any emissions imaged by the optical gas instrument;

(ii) Indications of liquids dripping;

(iii) Indications by a sensor that a seal or barrier fluid system has failed; or

(iv) Screening results using a 40 CFR part 60, appendix A-7, Method 21 monitor that exceed the leak definition in the applicable subpart to which the equipment is subject.

(h) The alternative work practice standard for monitoring equipment for leaks is available to all subparts in 40 CFR parts 60, 61, 63, and 65 that require monitoring of equipment with a 40 CFR part 60, appendix A-7, Method 21 monitor.

(1) An owner or operator of an affected source subject to CFR parts 60, 61, 63, or 65 can choose to comply with the alternative work practice requirements in paragraph (i) of this section instead of using the 40 CFR part 60, appendix A-7, Method 21 monitor to identify leaking equipment. The owner or operator must document the equipment, process units, and facilities for which the alternative work practice will be used to identify leaks.

(2) Any leak detected when following the leak survey procedure in paragraph (i)(3) of this section must be identified for repair as required in the applicable subpart.

(3) If the alternative work practice is used to identify leaks, re-screening after an attempted repair of leaking equipment must be conducted using either the alternative work practice or the 40 CFR part 60, appendix A-7, Method 21 monitor at the leak definition required in the applicable subpart to which the equipment is subject.

(4) The schedule for repair is as required in the applicable subpart.

(5) When this alternative work practice is used for detecting leaking equipment, choose one of the monitoring frequencies listed in Table 1 to subpart A of this part in lieu of the monitoring frequency specified for regulated equipment in the applicable subpart. Reduced monitoring frequencies for good performance are not applicable when using the alternative work practice.

(6) When this alternative work practice is used for detecting leaking equipment the following are not applicable for the equipment being monitored:

(i) Skip period leak detection and repair;

(ii) Quality improvement plans; or

(iii) Complying with standards for allowable percentage of valves and pumps to leak.

(7) When the alternative work practice is used to detect leaking equipment, the regulated equipment in paragraph (h)(1)(i) of this section must also be monitored annually using a 40 CFR part 60, appendix A-7, Method 21 monitor at the leak definition required in the applicable subpart. The owner or operator may choose the specific monitoring period (for example, first quarter) to conduct the annual monitoring. Subsequent monitoring must be conducted every 12 months from the initial period. Owners or operators must keep records of the annual Method 21 screening results, as specified in paragraph (i)(4)(vii) of this section.

(i) An owner or operator of an affected source who chooses to use the alternative work practice must comply with the requirements of paragraphs (i)(1) through (i)(5) of this section.

(1) Instrument Specifications. The optical gas imaging instrument must comply with the requirements in (i)(1)(i) and (i)(1)(ii) of this section.

(i) Provide the operator with an image of the potential leak points for each piece of equipment at both the detection sensitivity level and within the distance used in the daily instrument check described in paragraph (i)(2) of this section. The detection sensitivity level depends upon the frequency at which leak monitoring is to be performed.

(ii) Provide a date and time stamp for video records of every monitoring event.

(2) Daily Instrument Check. On a daily basis, and prior to beginning any leak monitoring work, test the optical gas imaging instrument at the mass flow rate determined in paragraph (i)(2)(i) of this section in

accordance with the procedure specified in paragraphs (i)(2)(ii) through (i)(2)(iv) of this section for each camera configuration used during monitoring (for example, different lenses used), unless an alternative method to demonstrate daily instrument checks has been approved in accordance with paragraph (i)(2)(v) of this section.

(i) Calculate the mass flow rate to be used in the daily instrument check by following the procedures in paragraphs (i)(2)(i)(A) and (i)(2)(i)(B) of this section.

(A) For a specified population of equipment to be imaged by the instrument, determine the piece of equipment in contact with the lowest mass fraction of chemicals that are detectable, within the distance to be used in paragraph (i)(2)(iv)(B) of this section, at or below the standard detection sensitivity level.

(B) Multiply the standard detection sensitivity level, corresponding to the selected monitoring frequency in Table 1 of subpart A of this part, by the mass fraction of detectable chemicals from the stream identified in paragraph (i)(2)(i)(A) of this section to determine the mass flow rate to be used in the daily instrument check, using the following equation.

$$E_{dic} = (E_{sds}) \sum_{i=1}^{k} x_i$$

Where:

E_{dic} = Mass flow rate for the daily instrument check, grams per hour

x_i = Mass fraction of detectable chemical(s) i seen by the optical gas imaging instrument, within the distance to be used in paragraph (i)(2)(iv)(B) of this section, at or below the standard detection sensitivity level, E_{sds}.

E_{sds} = Standard detection sensitivity level from Table 1 to subpart A, grams per hour

k = Total number of detectable chemicals emitted from the leaking equipment and seen by the optical gas imaging instrument.

(ii) Start the optical gas imaging instrument according to the manufacturer's instructions, ensuring that all appropriate settings conform to the manufacturer's instructions.

(iii) Use any gas chosen by the user that can be viewed by the optical gas imaging instrument and that has a purity of no less than 98 percent.

(iv) Establish a mass flow rate by using the following procedures:

(A) Provide a source of gas where it will be in the field of view of the optical gas imaging instrument.

(B) Set up the optical gas imaging instrument at a recorded distance from the outlet or leak orifice of the flow meter that will not be exceeded in the actual performance of the leak survey. Do not exceed the operating parameters of the flow meter.

(C) Open the valve on the flow meter to set a flow rate that will create a mass emission rate equal to the mass rate specified in paragraph (i)(2)(i) of this section while observing the gas flow through the optical gas imaging instrument viewfinder. When an image of the gas emission is seen through the viewfinder at the required emission rate, make a record of the reading on the flow meter.

(v) Repeat the procedures specified in paragraphs (i)(2)(ii) through (i)(2)(iv) of this section for each configuration of the optical gas imaging instrument used during the leak survey.

(vi) To use an alternative method to demonstrate daily instrument checks, apply to the Administrator for approval of the alternative under § 60.13(i).

(3) Leak Survey Procedure. Operate the optical gas imaging instrument to image every regulated piece of equipment selected for this work practice in accordance with the instrument manufacturer's operating parameters. All emissions imaged by the optical gas imaging instrument are considered to be leaks and are subject to repair. All emissions visible to the naked eye are also considered to be leaks and are subject to repair.

(4) Recordkeeping. You must keep the records described in paragraphs (i)(4)(i) through (i)(4)(vii) of this section:

(i) The equipment, processes, and facilities for which the owner or operator chooses to use the alternative work practice.

(ii) The detection sensitivity level selected from Table 1 to subpart A of this part for the optical gas imaging instrument.

(iii) The analysis to determine the piece of equipment in contact with the lowest mass fraction of chemicals that are detectable, as specified in paragraph (i)(2)(i)(A) of this section.

(iv) The technical basis for the mass fraction of detectable chemicals used in the equation in paragraph (i)(2)(i)(B) of this section.

(v) The daily instrument check. Record the distance, per paragraph (i)(2)(iv)(B) of this section, and the flow meter reading, per paragraph (i)(2)(iv)(C) of this section, at which the leak was imaged. Keep a video record of the daily instrument check for each configuration of the optical gas imaging instrument used during the leak survey (for example, the daily instrument check must be conducted for each lens used). The video record must include a time and date stamp for each daily instrument check. The video record must be kept for 5 years.

(vi) Recordkeeping requirements in the applicable subpart. A video record must be used to document the leak survey results. The video record must include a time and date stamp for each monitoring event. A video record can be used to meet the recordkeeping requirements of the applicable subparts if each piece of regulated equipment selected for this work practice can be identified in the video record. The video record must be kept for 5 years.

(vii) The results of the annual Method 21 screening required in paragraph (h)(7) of this section. Records must be kept for all regulated equipment specified in paragraph (h)(1) of this section. Records must identify the equipment screened, the screening value measured by Method 21, the time and date of the screening, and calibration information required in the existing applicable subpart.

(5) Reporting. Submit the reports required in the applicable subpart. Submit the records of the annual Method 21 screening required in paragraph (h)(7) of this section to the Administrator via e-mail to *CCG-AWP@EPA.GOV.*

§ 60.19 General notification and reporting requirements.

(a) For the purposes of this part, time periods specified in days shall be measured in calendar days, even if the word “calendar” is absent, unless otherwise specified in an applicable requirement.

(b) For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to

take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be delivered or postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery, including the use of electronic media, agreed to by the permitting authority, is acceptable.

(c) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.

(d) If an owner or operator of an affected facility in a State with delegated authority is required to submit periodic reports under this part to the State, and if the State has an established timeline for the submission of periodic reports that is consistent with the reporting frequency(ies) specified for such facility under this part, the owner or operator may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the owner or operator and the State. The allowance in the previous sentence applies in each State beginning 1 year after the affected facility is required to be in compliance with the applicable subpart in this part. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.

(e) If an owner or operator supervises one or more stationary sources affected by standards set under this part and standards set under part 61, part 63, or both such parts of this chapter, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State with an approved permit program) a common schedule on which periodic reports required by each applicable standard shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the stationary source is required to be in compliance with the applicable subpart in this part, or 1 year after the stationary source is required to be in compliance with the applicable 40 CFR part 61 or part 63 of this chapter standard, whichever is latest. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.

(f)

(1)

(i) Until an adjustment of a time period or postmark deadline has been approved by the Administrator under paragraphs (f)(2) and (f)(3) of this section, the owner or operator of an affected facility remains strictly subject to the requirements of this part.

(ii) An owner or operator shall request the adjustment provided for in paragraphs (f)(2) and (f)(3) of this section each time he or she wishes to change an applicable time period or postmark deadline specified in this part.

(2) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. An owner or operator who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as practicable before the subject activity is required to take place. The owner or operator shall include in the request whatever information he or she considers useful to convince the Administrator that an adjustment is warranted.

(3) If, in the Administrator's judgment, an owner or operator's request for an adjustment to a particular time period or postmark deadline is warranted, the Administrator will approve the adjustment. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an adjustment within 15 calendar days of receiving sufficient information to evaluate the request.

(4) If the Administrator is unable to meet a specified deadline, he or she will notify the owner or operator of any significant delay and inform the owner or operator of the amended schedule.

Table 1 to Subpart A of Part 60—Detection Sensitivity Levels (grams per hour)

Monitoring frequency per subpart[a]	Detection sensitivity level
Bi-Monthly	60
Semi-Quarterly	85
Monthly	100

[a] When this alternative work practice is used to identify leaking equipment, the owner or operator must choose one of the monitoring frequencies listed in this table in lieu of the monitoring frequency specified in the applicable subpart. Bi-monthly means every other month. Semi-quarterly means twice per quarter. Monthly means once per month.

Appendix K. 40 CFR pt. 60, subp. LL—Standards of Performance for Metallic Mineral Processing Plants

§60.380 Applicability and designation of affected facility.

(a) The provisions of this subpart are applicable to the following affected facilities in metallic mineral processing plants: Each crusher and screen in open-pit mines; each crusher, screen, bucket elevator, conveyor belt transfer point, thermal dryer, product packaging station, storage bin, enclosed storage area, truck loading station, truck unloading station, railcar loading station, and railcar unloading station at the mill or concentrator with the following exceptions. All facilities located in underground mines are exempted from the provisions of this subpart. At uranium ore processing plants, all facilities subsequent to and including the beneficiation of uranium ore are exempted from the provisions of this subpart.

(b) An affected facility under paragraph (a) of this section that commences construction or modification after August 24, 1982, is subject to the requirements of this part.

§60.381 Definitions.

All terms used in this subpart, but not specifically defined in this section, shall have the meaning given them in the Act and in subpart A of this part.

Bucket elevator means a conveying device for metallic minerals consisting of a head and foot assembly that supports and drives an endless single or double strand chain or belt to which buckets are attached.

Capture system means the equipment used to capture and transport particulate matter generated by one or more affected facilities to a control device.

Control device means the air pollution control equipment used to reduce particulate matter emissions released to the atmosphere from one or more affected facilities at a metallic mineral processing plant.

Conveyor belt transfer point means a point in the conveying operation where the metallic mineral or metallic mineral concentrate is transferred to or from a conveyor belt except where the metallic mineral is being transferred to a stockpile.

Crusher means a machine used to crush any metallic mineral and includes feeders or conveyors located immediately below the crushing surfaces. Crushers include, but are not limited to, the following types: jaw, gyratory, cone, and hammermill.

Enclosed storage area means any area covered by a roof under which metallic minerals are stored prior to further processing or loading.

Metallic mineral concentrate means a material containing metallic compounds in concentrations higher than naturally occurring in ore but requiring additional processing if pure metal is to be isolated. A metallic mineral concentrate contains at least one of the following metals in any of its oxidation states and at a concentration that contributes to the concentrate's commercial value: Aluminum, copper, gold, iron, lead, molybdenum, silver, titanium, tungsten, uranium, zinc, and zirconium. This definition shall not be construed as requiring that material containing metallic compounds be refined to a pure metal in order for the material to be considered a metallic mineral concentrate to be covered by the standards.

Metallic mineral processing plant means any combination of equipment that produces metallic mineral concentrates from ore. Metallic mineral processing commences with the mining of ore and includes all operations either up to and including the loading of wet or dry concentrates or solutions of metallic minerals for transfer to facilities at non-adjacent locations that will subsequently process metallic concentrates into purified metals (or other products), or up to and including all material transfer and storage operations that precede the operations that produce refined metals (or other products) from metallic mineral concentrates at facilities adjacent to the metallic mineral processing plant. This definition shall not be construed as requiring that mining

of ore be conducted in order for the combination of equipment to be considered a metallic mineral processing plant. (See also the definition of *metallic mineral concentrate.*)

Process fugitive emissions means particulate matter emissions from an affected facility that are not collected by a capture system.

Product packaging station means the equipment used to fill containers with metallic compounds or metallic mineral concentrates.

Railcar loading station means that portion of a metallic mineral processing plant where metallic minerals or metallic mineral concentrates are loaded by a conveying system into railcars.

Railcar unloading station means that portion of a metallic mineral processing plant where metallic ore is unloaded from a railcar into a hopper, screen, or crusher.

Screen means a device for separating material according to size by passing undersize material through one or more mesh surfaces (screens) in series and retaining oversize material on the mesh surfaces (screens).

Stack emissions means the particulate matter captured and released to the atmosphere through a stack, chimney, or flue.

Storage bin means a facility for storage (including surge bins and hoppers) of metallic minerals prior to further processing or loading.

Surface moisture means water that is not chemically bound to a metallic mineral or metallic mineral concentrate.

Thermal dryer means a unit in which the surface moisture content of a metallic mineral or a metallic mineral concentrate is reduced by direct or indirect contact with a heated gas stream.

Truck loading station means that portion of a metallic mineral processing plant where metallic minerals or metallic mineral concentrates are loaded by a conveying system into trucks.

Truck unloading station means that portion of a metallic mineral processing plant where metallic ore is unloaded from a truck into a hopper, screen, or crusher.

§60.382 Standard for particulate matter.

(a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from an affected facility any stack emissions that:

(1) Contain particulate matter in excess of 0.05 grams per dry standard cubic meter (0.05 g/dscm).

(2) Exhibit greater than 7 percent opacity, unless the stack emissions are discharged from an affected facility using a wet scrubbing emission control device.

(b) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from an affected facility any process fugitive emissions that exhibit greater than 10 percent opacity.

§60.383 Reconstruction.

(a) The cost of replacement of ore-contact surfaces on processing equipment shall not be considered in calculating either the “fixed capital cost of the new components” or the “fixed capital cost that would be required to construct a comparable new facility” under §60.15. Ore-contact surfaces are: Crushing surfaces; screen meshes, bars, and plates; conveyor belts; elevator buckets; and pan feeders.

(b) Under §60.15, the “fixed capital cost of the new components” includes the fixed capital cost of all depreciable components (except components specified in paragraph (a) of this section) that are or will be

replaced pursuant to all continuous programs of component replacement commenced within any 2-year period following August 24, 1982.

§60.384 Monitoring of operations.

(a) The owner or operator subject to the provisions of this subpart shall install, calibrate, maintain, and operate a monitoring device for the continuous measurement of the change in pressure of the gas stream through the scrubber for any affected facility using a wet scrubbing emission control device. The monitoring device must be certified by the manufacturer to be accurate within ±250 pascals (±1 inch water) gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions.

(b) The owner or operator subject to the provisions of this subpart shall install, calibrate, maintain, and operate a monitoring device for the continuous measurement of the scrubbing liquid flow rate to a wet scrubber for any affected facility using any type of wet scrubbing emission control device. The monitoring device must be certified by the manufacturer to be accurate within ±5 percent of design scrubbing liquid flow rate and must be calibrated on at least an annual basis in accordance with manufacturer's instructions.

§60.385 Recordkeeping and reporting requirements.

(a) The owner or operator subject to the provisions of this subpart shall conduct a performance test and submit to the Administrator a written report of the results of the test as specified in §60.8(a).

(b) During the initial performance test of a wet scrubber, and at least weekly thereafter, the owner or operator shall record the measurements of both the change in pressure of the gas stream across the scrubber and the scrubbing liquid flow rate.

(c) After the initial performance test of a wet scrubber, the owner or operator shall submit semiannual reports to the Administrator of occurrences when the measurements of the scrubber pressure loss (or gain) or liquid flow rate differ by more than ±30 percent from the average obtained during the most recent performance test.

(d) The reports required under paragraph (c) shall be postmarked within 30 days following the end of the second and fourth calendar quarters.

(e) The requirements of this subsection remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In that event, affected sources within the State will be relieved of the obligation to comply with this subsection, provided that they comply with requirements established by the State.

§60.386 Test methods and procedures.

(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).

(b) The owner or operator shall determine compliance with the particulate matter standards §60.382 as follows:

(1) Method 5 or 17 shall be used to determine the particulate matter concentration. The sample volume for each run shall be at least 1.70 dscm (60 dscf). The sampling probe and filter holder of Method 5 may be operated without heaters if the gas stream being sampled is at ambient temperature. For gas streams above ambient temperature, the Method 5 sampling train shall be operated with a probe and filter temperature slightly above the effluent temperature (up to a maximum filter temperature of 121 °C (250 °F)) in order to prevent water condensation on the filter.

(2) Method 9 and the procedures in §60.11 shall be used to determine opacity from stack emissions and process fugitive emissions. The observer shall read opacity only when emissions are clearly identified as

emanating solely from the affected facility being observed. A single visible emission observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval. This option is subject to the following limitations:

(i) No more than three emission points are read concurrently;

(ii) All three emission points must be within a 70° viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points; and

(iii) If an opacity reading for any one of the three emission points is within 5 percent opacity of the application standard, then the observer must stop taking readings for the other two points and continue reading just that single point.

(c) To comply with §60.385(c), the owner or operator shall use the monitoring devices in §60.384(a) and (b) to determine the pressure loss of the gas stream through the scrubber and scrubbing liquid flow rate at any time during each particulate matter run, and the average of the three determinations shall be computed.

Appendix L. 40 CFR pt. 60, subp. OOO—Standards of Performance for Nonmetallic Mineral Processing Plants

§60.670 Applicability and designation of affected facility.

(a)(1) Except as provided in paragraphs (a)(2), (b), (c), and (d) of this section, the provisions of this subpart are applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station. Also, crushers and grinding mills at hot mix asphalt facilities that reduce the size of nonmetallic minerals embedded in recycled asphalt pavement and subsequent affected facilities up to, but not including, the first storage silo or bin are subject to the provisions of this subpart.

(2) The provisions of this subpart do not apply to the following operations: All facilities located in underground mines; plants without crushers or grinding mills above ground; and wet material processing operations (as defined in §60.671).

(b) An affected facility that is subject to the provisions of subparts F or I of this part or that follows in the plant process any facility subject to the provisions of subparts F or I of this part is not subject to the provisions of this subpart.

(c) Facilities at the following plants are not subject to the provisions of this subpart:

(1) Fixed sand and gravel plants and crushed stone plants with capacities, as defined in §60.671, of 23 megagrams per hour (25 tons per hour) or less;

(2) Portable sand and gravel plants and crushed stone plants with capacities, as defined in §60.671, of 136 megagrams per hour (150 tons per hour) or less; and

(3) Common clay plants and pumice plants with capacities, as defined in §60.671, of 9 megagrams per hour (10 tons per hour) or less.

(d)(1) When an existing facility is replaced by a piece of equipment of equal or smaller size, as defined in §60.671, having the same function as the existing facility, and there is no increase in the amount of emissions, the new facility is exempt from the provisions of §§60.672, 60.674, and 60.675 except as provided for in paragraph (d)(3) of this section.

(2) An owner or operator complying with paragraph (d)(1) of this section shall submit the information required in §60.676(a).

(3) An owner or operator replacing all existing facilities in a production line with new facilities does not qualify for the exemption described in paragraph (d)(1) of this section and must comply with the provisions of §§60.672, 60.674 and 60.675.

(e) An affected facility under paragraph (a) of this section that commences construction, modification, or reconstruction after August 31, 1983, is subject to the requirements of this part.

(f) Table 1 of this subpart specifies the provisions of subpart A of this part 60 that do not apply to owners and operators of affected facilities subject to this subpart or that apply with certain exceptions.

§60.671 Definitions.

All terms used in this subpart, but not specifically defined in this section, shall have the meaning given them in the Act and in subpart A of this part.

Bagging operation means the mechanical process by which bags are filled with nonmetallic minerals.

Belt conveyor means a conveying device that transports material from one location to another by means of an endless belt that is carried on a series of idlers and routed around a pulley at each end.

Bucket elevator means a conveying device of nonmetallic minerals consisting of a head and foot assembly which supports and drives an endless single or double strand chain or belt to which buckets are attached.

Building means any frame structure with a roof.

Capacity means the cumulative rated capacity of all initial crushers that are part of the plant.

Capture system means the equipment (including enclosures, hoods, ducts, fans, dampers, etc.) used to capture and transport particulate matter generated by one or more affected facilities to a control device.

Control device means the air pollution control equipment used to reduce particulate matter emissions released to the atmosphere from one or more affected facilities at a nonmetallic mineral processing plant.

Conveying system means a device for transporting materials from one piece of equipment or location to another location within a plant. Conveying systems include but are not limited to the following: Feeders, belt conveyors, bucket elevators and pneumatic systems.

Crush or *Crushing* means to reduce the size of nonmetallic mineral material by means of physical impaction of the crusher or grinding mill upon the material.

Crusher means a machine used to crush any nonmetallic minerals, and includes, but is not limited to, the following types: Jaw, gyratory, cone, roll, rod mill, hammermill, and impactor.

Enclosed truck or railcar loading station means that portion of a nonmetallic mineral processing plant where nonmetallic minerals are loaded by an enclosed conveying system into enclosed trucks or railcars.

Fixed plant means any nonmetallic mineral processing plant at which the processing equipment specified in §60.670(a) is attached by a cable, chain, turnbuckle, bolt or other means (except electrical connections) to any anchor, slab, or structure including bedrock.

Fugitive emission means particulate matter that is not collected by a capture system and is released to the atmosphere at the point of generation.

Grinding mill means a machine used for the wet or dry fine crushing of any nonmetallic mineral. Grinding mills include, but are not limited to, the following types: Hammer, roller, rod, pebble and ball, and fluid energy. The grinding mill includes the air conveying system, air separator, or air classifier, where such systems are used.

Initial crusher means any crusher into which nonmetallic minerals can be fed without prior crushing in the plant.

Nonmetallic mineral means any of the following minerals or any mixture of which the majority is any of the following minerals:

(1) Crushed and Broken Stone, including Limestone, Dolomite, Granite, Traprock, Sandstone, Quartz, Quartzite, Marl, Marble, Slate, Shale, Oil Shale, and Shell.

(2) Sand and Gravel.

(3) Clay including Kaolin, Fireclay, Bentonite, Fuller's Earth, Ball Clay, and Common Clay.

(4) Rock Salt.

(5) Gypsum (natural or synthetic).

(6) Sodium Compounds, including Sodium Carbonate, Sodium Chloride, and Sodium Sulfate.

(7) Pumice.

(8) Gilsonite.

(9) Talc and Pyrophyllite.

(10) Boron, including Borax, Kernite, and Colemanite.

(11) Barite.

(12) Fluorospar.

(13) Feldspar.

(14) Diatomite.

(15) Perlite.

(16) Vermiculite.

(17) Mica.

(18) Kyanite, including Andalusite, Sillimanite, Topaz, and Dumortierite.

Nonmetallic mineral processing plant means any combination of equipment that is used to crush or grind any nonmetallic mineral wherever located, including lime plants, power plants, steel mills, asphalt concrete plants, portland cement plants, or any other facility processing nonmetallic minerals except as provided in §60.670 (b) and (c).

Portable plant means any nonmetallic mineral processing plant that is mounted on any chassis or skids and may be moved by the application of a lifting or pulling force. In addition, there shall be no cable, chain, turnbuckle, bolt or other means (except electrical connections) by which any piece of equipment is attached or clamped to any anchor, slab, or structure, including bedrock that must be removed prior to the application of a lifting or pulling force for the purpose of transporting the unit.

Production line means all affected facilities (crushers, grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed truck and railcar loading stations) which are directly connected or are connected together by a conveying system.

Saturated material means, for purposes of this subpart, mineral material with sufficient surface moisture such that particulate matter emissions are not generated from processing of the material through screening operations, bucket elevators and belt conveyors. Material that is wetted solely by wet suppression systems is not considered to be “saturated” for purposes of this definition.

Screening operation means a device for separating material according to size by passing undersize material through one or more mesh surfaces (screens) in series, and retaining oversize material on the mesh surfaces (screens). Grizzly feeders associated with truck dumping and static (non-moving) grizzlies used anywhere in the nonmetallic mineral processing plant are not considered to be screening operations.

Seasonal shut down means shut down of an affected facility for a period of at least 45 consecutive days due to weather or seasonal market conditions.

Size means the rated capacity in tons per hour of a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station; the total surface area of the top screen of a screening operation; the width of a conveyor belt; and the rated capacity in tons of a storage bin.

Stack emission means the particulate matter that is released to the atmosphere from a capture system.

Storage bin means a facility for storage (including surge bins) of nonmetallic minerals prior to further processing or loading.

Transfer point means a point in a conveying operation where the nonmetallic mineral is transferred to or from a belt conveyor except where the nonmetallic mineral is being transferred to a stockpile.

Truck dumping means the unloading of nonmetallic minerals from movable vehicles designed to transport nonmetallic minerals from one location to another. Movable vehicles include but are not limited to: Trucks, front end loaders, skip hoists, and railcars.

Vent means an opening through which there is mechanically induced air flow for the purpose of exhausting from a building air carrying particulate matter emissions from one or more affected facilities.

Wet material processing operation(s) means any of the following:

(1) Wet screening operations (as defined in this section) and subsequent screening operations, bucket elevators and belt conveyors in the production line that process saturated materials (as defined in this section) up to the first crusher, grinding mill or storage bin in the production line; or

(2) Screening operations, bucket elevators and belt conveyors in the production line downstream of wet mining operations (as defined in this section) that process saturated materials (as defined in this section) up to the first crusher, grinding mill or storage bin in the production line.

Wet mining operation means a mining or dredging operation designed and operated to extract any nonmetallic mineral regulated under this subpart from deposits existing at or below the water table, where the nonmetallic mineral is saturated with water.

Wet screening operation means a screening operation at a nonmetallic mineral processing plant which removes unwanted material or which separates marketable fines from the product by a washing process which is designed and operated at all times such that the product is saturated with water.

§60.672 Standard for particulate matter (PM).

(a) Affected facilities must meet the stack emission limits and compliance requirements in Table 2 of this subpart within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.8. The requirements in Table 2 of this subpart apply for affected facilities with capture systems used to capture and transport particulate matter to a control device.

(b) Affected facilities must meet the fugitive emission limits and compliance requirements in Table 3 of this subpart within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.11. The requirements in Table 3 of this subpart apply for fugitive emissions from affected facilities without capture systems and for fugitive emissions escaping capture systems.

(c) [Reserved]

(d) Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section.

(e) If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limits in paragraphs (a) and (b) of this section, or the building enclosing the affected facility or facilities must comply with the following emission limits:

(1) Fugitive emissions from the building openings (except for vents as defined in §60.671) must not exceed 7 percent opacity; and

(2) Vents (as defined in §60.671) in the building must meet the applicable stack emission limits and compliance requirements in Table 2 of this subpart.

(f) Any baghouse that controls emissions from only an individual, enclosed storage bin is exempt from the applicable stack PM concentration limit (and associated performance testing) in Table 2 of this subpart but must meet the applicable stack opacity limit and compliance requirements in Table 2 of this subpart. This exemption from the stack PM concentration limit does not apply for multiple storage bins with combined stack emissions.

§60.673 Reconstruction.

(a) The cost of replacement of ore-contact surfaces on processing equipment shall not be considered in calculating either the "fixed capital cost of the new components" or the "fixed capital cost that would be required to construct a comparable new facility" under §60.15. Ore-contact surfaces are crushing surfaces; screen meshes, bars, and plates; conveyor belts; and elevator buckets.

(b) Under §60.15, the "fixed capital cost of the new components" includes the fixed capital cost of all depreciable components (except components specified in paragraph (a) of this section) which are or will be replaced pursuant to all continuous programs of component replacement commenced within any 2-year period following August 31, 1983.

§60.674 Monitoring of operations.

(a) The owner or operator of any affected facility subject to the provisions of this subpart which uses a wet scrubber to control emissions shall install, calibrate, maintain and operate the following monitoring devices:

(1) A device for the continuous measurement of the pressure loss of the gas stream through the scrubber. The monitoring device must be certified by the manufacturer to be accurate within ±250 pascals ±1 inch water gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions.

(2) A device for the continuous measurement of the scrubbing liquid flow rate to the wet scrubber. The monitoring device must be certified by the manufacturer to be accurate within ±5 percent of design scrubbing liquid flow rate and must be calibrated on an annual basis in accordance with manufacturer's instructions.

(b) The owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses wet suppression to control emissions from the affected facility must perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The owner or operator must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the owner or operator finds that water is not flowing properly during an inspection of the water spray nozzles. The owner or operator must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken, in the logbook required under §60.676(b).

(1) If an affected facility relies on water carryover from upstream water sprays to control fugitive emissions, then that affected facility is exempt from the 5-year repeat testing requirement specified in Table 3 of this subpart provided that the affected facility meets the criteria in paragraphs (b)(1)(i) and (ii) of this section:

(i) The owner or operator of the affected facility conducts periodic inspections of the upstream water spray(s) that are responsible for controlling fugitive emissions from the affected facility. These inspections are conducted according to paragraph (b) of this section and §60.676(b), and

(ii) The owner or operator of the affected facility designates which upstream water spray(s) will be periodically inspected at the time of the initial performance test required under §60.11 of this part and §60.675 of this subpart.

(2) If an affected facility that routinely uses wet suppression water sprays ceases operation of the water sprays or is using a control mechanism to reduce fugitive emissions other than water sprays during the monthly inspection (for example, water from recent rainfall), the logbook entry required under §60.676(b) must specify the control mechanism being used instead of the water sprays.

(c) Except as specified in paragraph (d) or (e) of this section, the owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses a baghouse to control emissions must conduct quarterly 30-minute visible emissions inspections using EPA

Method 22 (40 CFR part 60, appendix A-7). The Method 22 (40 CFR part 60, appendix A-7) test shall be conducted while the baghouse is operating. The test is successful if no visible emissions are observed. If any visible emissions are observed, the owner or operator of the affected facility must initiate corrective action within 24 hours to return the baghouse to normal operation. The owner or operator must record each Method 22 (40 CFR part 60, appendix A-7) test, including the date and any corrective actions taken, in the logbook required under §60.676(b). The owner or operator of the affected facility may establish a different baghouse-specific success level for the visible emissions test (other than no visible emissions) by conducting a PM performance test according to §60.675(b) simultaneously with a Method 22 (40 CFR part 60, appendix A-7) to determine what constitutes normal visible emissions from that affected facility's baghouse when it is in compliance with the applicable PM concentration limit in Table 2 of this subpart. The revised visible emissions success level must be incorporated into the permit for the affected facility.

(d) As an alternative to the periodic Method 22 (40 CFR part 60, appendix A-7) visible emissions inspections specified in paragraph (c) of this section, the owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses a baghouse to control emissions may use a bag leak detection system. The owner or operator must install, operate, and maintain the bag leak detection system according to paragraphs (d)(1) through (3) of this section.

(1) Each bag leak detection system must meet the specifications and requirements in paragraphs (d)(1)(i) through (viii) of this section.

(i) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 1 milligram per dry standard cubic meter (0.00044 grains per actual cubic foot) or less.

(ii) The bag leak detection system sensor must provide output of relative PM loadings. The owner or operator shall continuously record the output from the bag leak detection system using electronic or other means (*e.g.*, using a strip chart recorder or a data logger).

(iii) The bag leak detection system must be equipped with an alarm system that will sound when the system detects an increase in relative particulate loading over the alarm set point established according to paragraph (d)(1)(iv) of this section, and the alarm must be located such that it can be heard by the appropriate plant personnel.

(iv) In the initial adjustment of the bag leak detection system, the owner or operator must establish, at a minimum, the baseline output by adjusting the sensitivity (range) and the averaging period of the device, the alarm set points, and the alarm delay time.

(v) Following initial adjustment, the owner or operator shall not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority except as provided in paragraph (d)(1)(vi) of this section.

(vi) Once per quarter, the owner or operator may adjust the sensitivity of the bag leak detection system to account for seasonal effects, including temperature and humidity, according to the procedures identified in the site-specific monitoring plan required by paragraph (d)(2) of this section.

(vii) The owner or operator must install the bag leak detection sensor downstream of the fabric filter.

(viii) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(2) The owner or operator of the affected facility must develop and submit to the Administrator or delegated authority for approval of a site-specific monitoring plan for each bag leak detection system. The

owner or operator must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. Each monitoring plan must describe the items in paragraphs (d)(2)(i) through (vi) of this section.

(i) Installation of the bag leak detection system;

(ii) Initial and periodic adjustment of the bag leak detection system, including how the alarm set-point will be established;

(iii) Operation of the bag leak detection system, including quality assurance procedures;

(iv) How the bag leak detection system will be maintained, including a routine maintenance schedule and spare parts inventory list;

(v) How the bag leak detection system output will be recorded and stored; and

(vi) Corrective action procedures as specified in paragraph (d)(3) of this section. In approving the site-specific monitoring plan, the Administrator or delegated authority may allow owners and operators more than 3 hours to alleviate a specific condition that causes an alarm if the owner or operator identifies in the monitoring plan this specific condition as one that could lead to an alarm, adequately explains why it is not feasible to alleviate this condition within 3 hours of the time the alarm occurs, and demonstrates that the requested time will ensure alleviation of this condition as expeditiously as practicable.

(3) For each bag leak detection system, the owner or operator must initiate procedures to determine the cause of every alarm within 1 hour of the alarm. Except as provided in paragraph (d)(2)(vi) of this section, the owner or operator must alleviate the cause of the alarm within 3 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:

(i) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in PM emissions;

(ii) Sealing off defective bags or filter media;

(iii) Replacing defective bags or filter media or otherwise repairing the control device;

(iv) Sealing off a defective fabric filter compartment;

(v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or

(vi) Shutting down the process producing the PM emissions.

(e) As an alternative to the periodic Method 22 (40 CFR part 60, appendix A-7) visible emissions inspections specified in paragraph (c) of this section, the owner or operator of any affected facility that is subject to the requirements for processed stone handling operations in the Lime Manufacturing NESHAP (40 CFR part 63, subpart AAAAA) may follow the continuous compliance requirements in row 1 items (i) through (iii) of table 6 to subpart AAAAA of 40 CFR part 63.

§60.675 Test methods and procedures.

(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendices A-1 through A-7 of this part or other methods and procedures as specified in this section, except as provided in §60.8(b). Acceptable alternative methods and procedures are given in paragraph (e) of this section.

(b) The owner or operator shall determine compliance with the PM standards in §60.672(a) as follows:

(1) Except as specified in paragraphs (e)(3) and (4) of this section, Method 5 of appendix A-3 of this part or Method 17 of appendix A-6 of this part shall be used to determine the particulate matter concentration. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5 (40 CFR part 60, appendix A-3), if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter.

(2) Method 9 of appendix A-4 of this part and the procedures in §60.11 shall be used to determine opacity.

(c)(1) In determining compliance with the particulate matter standards in §60.672(b) or §60.672(e)(1), the owner or operator shall use Method 9 of appendix A-4 of this part and the procedures in §60.11, with the following additions:

(i) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).

(ii) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (*e.g.,* road dust). The required observer position relative to the sun (Method 9 of appendix A-4 of this part, Section 2.1) must be followed.

(iii) For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

(2)(i) In determining compliance with the opacity of stack emissions from any baghouse that controls emissions only from an individual enclosed storage bin under §60.672(f) of this subpart, using Method 9 (40 CFR part 60, appendix A-4), the duration of the Method 9 (40 CFR part 60, appendix A-4) observations shall be 1 hour (ten 6-minute averages).

(ii) The duration of the Method 9 (40 CFR part 60, appendix A-4) observations may be reduced to the duration the affected facility operates (but not less than 30 minutes) for baghouses that control storage bins or enclosed truck or railcar loading stations that operate for less than 1 hour at a time.

(3) When determining compliance with the fugitive emissions standard for any affected facility described under §60.672(b) or §60.672(e)(1) of this subpart, the duration of the Method 9 (40 CFR part 60, appendix A-4) observations must be 30 minutes (five 6-minute averages). Compliance with the applicable fugitive emission limits in Table 3 of this subpart must be based on the average of the five 6-minute averages.

(d) To demonstrate compliance with the fugitive emission limits for buildings specified in §60.672(e)(1), the owner or operator must complete the testing specified in paragraph (d)(1) and (2) of this section. Performance tests must be conducted while all affected facilities inside the building are operating.

(1) If the building encloses any affected facility that commences construction, modification, or reconstruction on or after April 22, 2008, the owner or operator of the affected facility must conduct an initial Method 9 (40 CFR part 60, appendix A-4) performance test according to this section and §60.11.

(2) If the building encloses only affected facilities that commenced construction, modification, or reconstruction before April 22, 2008, and the owner or operator has previously conducted an initial Method 22 (40 CFR part 60, appendix A-7) performance test showing zero visible emissions, then the owner or operator has demonstrated compliance with the opacity limit in §60.672(e)(1). If the owner or operator has not conducted an initial performance test for the building before April 22, 2008, then the owner or operator must conduct an initial Method 9 (40 CFR part 60, appendix A-4) performance test according to this section and §60.11 to show compliance with the opacity limit in §60.672(e)(1).

(e) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:

(1) For the method and procedure of paragraph (c) of this section, if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used:

(i) Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream.

(ii) Separate the emissions so that the opacity of emissions from each affected facility can be read.

(2) A single visible emission observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions are met:

(i) No more than three emission points may be read concurrently.

(ii) All three emission points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.

(iii) If an opacity reading for any one of the three emission points equals or exceeds the applicable standard, then the observer must stop taking readings for the other two points and continue reading just that single point.

(3) Method 5I of appendix A-3 of this part may be used to determine the PM concentration as an alternative to the methods specified in paragraph (b)(1) of this section. Method 5I (40 CFR part 60, appendix A-3) may be useful for affected facilities that operate for less than 1 hour at a time such as (but not limited to) storage bins or enclosed truck or railcar loading stations.

(4) In some cases, velocities of exhaust gases from building vents may be too low to measure accurately with the type S pitot tube specified in EPA Method 2 of appendix A-1 of this part [*i.e.,* velocity head <1.3 mm H_2O (0.05 in. H_2O)] and referred to in EPA Method 5 of appendix A-3 of this part. For these conditions, the owner or operator may determine the average gas flow rate produced by the power fans (*e.g.,* from vendor-supplied fan curves) to the building vent. The owner or operator may calculate the average gas velocity at the building vent measurement site using Equation 1 of this section and use this average velocity in determining and maintaining isokinetic sampling rates.

$$v_e = \frac{Q_f}{A_e} \qquad \text{(Eq. 1)}$$

Where:

V_e = average building vent velocity (feet per minute);

Q_f = average fan flow rate (cubic feet per minute); and

A_e = area of building vent and measurement location (square feet).

(f) To comply with §60.676(d), the owner or operator shall record the measurements as required in §60.676(c) using the monitoring devices in §60.674 (a)(1) and (2) during each particulate matter run and shall determine the averages.

(g) For performance tests involving only Method 9 (40 CFR part 60 appendix A-4) testing, the owner or operator may reduce the 30-day advance notification of performance test in §60.7(a)(6) and 60.8(d) to a 7-day advance notification.

(h) [Reserved]

(i) If the initial performance test date for an affected facility falls during a seasonal shut down (as defined in §60.671 of this subpart) of the affected facility, then with approval from the permitting authority, the owner or operator may postpone the initial performance test until no later than 60 calendar days after resuming operation of the affected facility.

§60.676 Reporting and recordkeeping.

(a) Each owner or operator seeking to comply with §60.670(d) shall submit to the Administrator the following information about the existing facility being replaced and the replacement piece of equipment.

(1) For a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station:

(i) The rated capacity in megagrams or tons per hour of the existing facility being replaced and

(ii) The rated capacity in tons per hour of the replacement equipment.

(2) For a screening operation:

(i) The total surface area of the top screen of the existing screening operation being replaced and

(ii) The total surface area of the top screen of the replacement screening operation.

(3) For a conveyor belt:

(i) The width of the existing belt being replaced and

(ii) The width of the replacement conveyor belt.

(4) For a storage bin:

(i) The rated capacity in megagrams or tons of the existing storage bin being replaced and

(ii) The rated capacity in megagrams or tons of replacement storage bins.

(b)(1) Owners or operators of affected facilities (as defined in §§60.670 and 60.671) for which construction, modification, or reconstruction commenced on or after April 22, 2008, must record each periodic inspection required under §60.674(b) or (c), including dates and any corrective actions taken, in a logbook (in written or electronic format). The owner or operator must keep the logbook onsite and make hard or electronic copies (whichever is requested) of the logbook available to the Administrator upon request.

(2) For each bag leak detection system installed and operated according to §60.674(d), the owner or operator must keep the records specified in paragraphs (b)(2)(i) through (iii) of this section.

(i) Records of the bag leak detection system output;

(ii) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings; and

(iii) The date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and whether the cause of the alarm was alleviated within 3 hours of the alarm.

(3) The owner or operator of each affected facility demonstrating compliance according to §60.674(e) by following the requirements for processed stone handling operations in the Lime Manufacturing NESHAP (40 CFR part 63, subpart AAAAA) must maintain records of visible emissions observations required by §63.7132(a)(3) and (b) of 40 CFR part 63, subpart AAAAA.

(c) During the initial performance test of a wet scrubber, and daily thereafter, the owner or operator shall record the measurements of both the change in pressure of the gas stream across the scrubber and the scrubbing liquid flow rate.

(d) After the initial performance test of a wet scrubber, the owner or operator shall submit semiannual reports to the Administrator of occurrences when the measurements of the scrubber pressure loss and liquid flow rate decrease by more than 30 percent from the average determined during the most recent performance test.

(e) The reports required under paragraph (d) of this section shall be postmarked within 30 days following end of the second and fourth calendar quarters.

(f) The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in §60.672 of this subpart, including reports of opacity observations made using Method 9 (40 CFR part 60, appendix A-4) to demonstrate compliance with §60.672(b), (e) and (f).

(g) The owner or operator of any wet material processing operation that processes saturated and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following such change. At the time of such change, this screening operation, bucket elevator, or belt conveyor becomes subject to the applicable opacity limit in §60.672(b) and the emission test requirements of §60.11.

(h) The subpart A requirement under §60.7(a)(1) for notification of the date construction or reconstruction commenced is waived for affected facilities under this subpart.

(i) A notification of the actual date of initial startup of each affected facility shall be submitted to the Administrator.

(1) For a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted by the owner or operator to the Administrator. The notification shall be postmarked within 15 days after such date and shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available.

(2) For portable aggregate processing plants, the notification of the actual date of initial startup shall include both the home office and the current address or location of the portable plant.

(j) The requirements of this section remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In that event, affected facilities within the State will be relieved of the obligation to comply with the reporting requirements of this section, provided that they comply with requirements established by the State.

(k) Notifications and reports required under this subpart and under subpart A of this part to demonstrate compliance with this subpart need only to be sent to the EPA Region or the State which has been delegated authority according to §60.4(b).

Table 1 to Subpart OOO of Part 60—Exceptions to Applicability of Subpart A to Subpart OOO

Subpart A reference	Applies to subpart OOO	Explanation
60.4, Address	Yes	Except in §60.4(a) and (b) submittals need not be submitted to both the EPA Region and delegated State authority (§60.676(k)).
60.7, Notification and	Yes	Except in (a)(1) notification of the date construction or

Subpart A reference	Applies to subpart OOO	Explanation
recordkeeping		reconstruction commenced (§60.676(h)).
		Also, except in (a)(6) performance tests involving only Method 9 (40 CFR part 60, appendix A-4) require a 7-day advance notification instead of 30 days (§60.675(g)).
60.8, Performance tests	Yes	Except in (d) performance tests involving only Method 9 (40 CFR part 60, appendix A-4) require a 7-day advance notification instead of 30 days (§60.675(g)).
60.11, Compliance with standards and maintenance requirements	Yes	Except in (b) under certain conditions (§§60.675(c)), Method 9 (40 CFR part 60, appendix A-4) observation is reduced from 3 hours to 30 minutes for fugitive emissions.
60.18, General control device	No	Flares will not be used to comply with the emission limits.

Table 2 to Subpart OOO of Part 60—Stack Emission Limits for Affected Facilities With Capture Systems

For * * *	The owner or operator must meet a PM limit of * * *	And the owner or operator must meet an opacity limit of * * *	The owner or operator must demonstrate compliance with these limits by conducting * * *
Affected facilities (as defined in §§60.670 and 60.671) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008	0.05 g/dscm (0.022 gr/dscf)[a]	7 percent for dry control devices[b]	An initial performance test according to §60.8 of this part and §60.675 of this subpart; and Monitoring of wet scrubber parameters according to §60.674(a) and §60.676(c), (d), and (e).
Affected facilities (as defined in §§60.670 and 60.671) that commence construction, modification, or reconstruction on or after April 22, 2008	0.032 g/dscm (0.014 gr/dscf)[a]	Not applicable (except for individual enclosed storage bins) 7 percent for dry control devices on individual enclosed storage bins	An initial performance test according to §60.8 of this part and §60.675 of this subpart; and Monitoring of wet scrubber parameters according to §60.674(a) and §60.676(c), (d), and (e); and
			Monitoring of baghouses according to §60.674(c), (d), or (e) and §60.676(b).

[a]Exceptions to the PM limit apply for individual enclosed storage bins and other equipment. See §60.672(d) through (f).

[b]The stack opacity limit and associated opacity testing requirements do not apply for affected facilities using wet scrubbers.

Table 3 to Subpart OOO of Part 60—Fugitive Emission Limits

For * * *	The owner or operator must meet the following fugitive emissions limit for grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations or from any other affected facility (as defined in §§60.670 and 60.671) * * *	The owner or operator must meet the following fugitive emissions limit for crushers at which a capture system is not used * * *	The owner or operator must demonstrate compliance with these limits by conducting * * *
Affected facilities (as defined in §§60.670 and 60.671) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008	10 percent opacity	15 percent opacity	An initial performance test according to §60.11 of this part and §60.675 of this subpart.
Affected facilities (as defined in §§60.670 and 60.671) that commence construction, modification, or reconstruction on or after April 22, 2008	7 percent opacity	12 percent opacity	An initial performance test according to §60.11 of this part and §60.675 of this subpart; and Periodic inspections of water sprays according to §60.674(b) and §60.676(b); and
			A repeat performance test according to §60.11 of this part and §60.675 of this subpart within 5 years from the previous performance test for fugitive emissions from affected facilities without water sprays. Affected facilities controlled by water carryover from upstream water sprays that are inspected according to the requirements in §60.674(b) and §60.676(b) are exempt from this 5-year repeat testing requirement.

Appendix M. 40 CFR pt. 60, subp. IIII—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

§ 60.4200 Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified in paragraphs (a)(1) through (4) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:

(i) 2007 or later, for engines that are not fire pump engines;

(ii) The model year listed in Table 3 to this subpart or later model year, for fire pump engines.

(2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are:

(i) Manufactured after April 1, 2006, and are not fire pump engines, or

(ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

(3) Owners and operators of any stationary CI ICE that are modified or reconstructed after July 11, 2005 and any person that modifies or reconstructs any stationary CI ICE after July 11, 2005.

(4) The provisions of § 60.4208 of this subpart are applicable to all owners and operators of stationary CI ICE that commence construction after July 11, 2005.

(b) The provisions of this subpart are not applicable to stationary CI ICE being tested at a stationary CI ICE test cell/stand.

(c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

(d) Stationary CI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C, except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

(e) Owners and operators of facilities with CI ICE that are acting as temporary replacement units and that are located at a stationary source for less than 1 year and that have been properly certified as meeting the standards that would be applicable to such engine under the appropriate nonroad engine provisions, are not required to meet any other provisions under this subpart with regard to such engines.

Emission Standards for Manufacturers

§ 60.4201 What emission standards must I meet for non-emergency engines if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later non-emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 kilowatt (KW) (3,000 horsepower (HP)) and a displacement of less than 10 liters per cylinder to the certification emission standards

for new nonroad CI engines in 40 CFR 1039.101, 1039.102, 1039.104, 1039.105, 1039.107, and 1039.115 and 40 CFR part 1039, appendix I, as applicable, for all pollutants, for the same model year and maximum engine power.

(b) Stationary CI internal combustion engine manufacturers must certify their 2007 through 2010 model year non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.

(c) Stationary CI internal combustion engine manufacturers must certify their 2011 model year and later non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same maximum engine power.

(d) Stationary CI internal combustion engine manufacturers must certify the following non-emergency stationary CI ICE to the appropriate Tier 2 emission standards for new marine CI engines as described in 40 CFR part 1042, appendix I, for all pollutants, for the same displacement and rated power:

(1) Their 2007 model year through 2012 non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder;

(2) Their 2013 model year non-emergency stationary CI ICE with a maximum engine power greater than or equal to 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

(3) Their 2013 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

(e) Stationary CI internal combustion engine manufacturers must certify the following non-emergency stationary CI ICE to the certification emission standards and other requirements for new marine CI engines in 40 CFR 1042.101, 40 CFR 1042.107, 40 CFR 1042.110, 40 CFR 1042.115, 40 CFR 1042.120, and 40 CFR 1042.145, as applicable, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2013 model year non-emergency stationary CI ICE with a maximum engine power less than 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

(2) Their 2014 model year and later non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.

(f) Notwithstanding the requirements in paragraphs (a) through (c) of this section, stationary non-emergency CI ICE identified in paragraphs (a) and (c) of this section may be certified to the provisions of 40 CFR part 1042 for commercial engines that are applicable for the engine's model year, displacement, power density, and maximum engine power if the engines will be used solely in either or both of the following locations:

(1) Remote areas of Alaska; and

(2) Marine offshore installations.

(g) Notwithstanding the requirements in paragraphs (a) through (f) of this section, stationary CI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (e) of this section that are applicable to the model year, maximum engine power, and displacement of the reconstructed stationary CI ICE.

(h) Stationary CI ICE certified to the standards in 40 CFR part 1039 and equipped with auxiliary emission control devices (AECDs) as specified in 40 CFR 1039.665 must meet the Tier 1 certification emission standards for new nonroad CI engines in 40 CFR part 1039, appendix I, while the AECD is activated during a qualified emergency situation. A qualified emergency situation is defined in 40 CFR 1039.665. When the qualified emergency situation has ended and the AECD is deactivated, the engine must resume meeting the otherwise applicable emission standard specified in this section.

§ 60.4202 What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.

(1) For engines with a maximum engine power less than 37 KW (50 HP):

(i) The Tier 2 emission standards for new nonroad CI engines for the appropriate rated power as described in 40 CFR part 1039, appendix I, for all pollutants and the smoke standards as specified in 40 CFR 1039.105 for model year 2007 engines; and

(ii) The certification emission standards for new nonroad CI engines in 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, 40 CFR 1039.115, and table 2 to this subpart, for 2008 model year and later engines.

(2) For engines with a rated power greater than or equal to 37 KW (50 HP), the Tier 2 or Tier 3 emission standards for new nonroad CI engines for the same rated power as described in 40 CFR part 1039, appendix I, for all pollutants and the smoke standards as specified in 40 CFR 1039.105 beginning in model year 2007.

(b) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (b)(1) through (2) of this section.

(1) For 2007 through 2010 model years, the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.

(2) For 2011 model year and later, the Tier 2 emission standards as described in 40 CFR part 1039, appendix I, for all pollutants and the smoke standards as specified in 40 CFR 1039.105.

(c) [Reserved]

(d) Beginning with the model years in table 3 to this subpart, stationary CI internal combustion engine manufacturers must certify their fire pump stationary CI ICE to the emission standards in table 4 to this subpart, for all pollutants, for the same model year and NFPA nameplate power.

(e) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE that are not fire pump engines to the appropriate Tier 2 emission standards for new marine CI engines as described in 40 CFR part 1042, appendix I, for all pollutants, for the same displacement and rated power:

(1) Their 2007 model year through 2012 emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder;

(2) Their 2013 model year and later emergency stationary CI ICE with a maximum engine power greater than or equal to 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder;

(3) Their 2013 model year emergency stationary CI ICE with a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder; and

(4) Their 2014 model year and later emergency stationary CI ICE with a maximum engine power greater than or equal to 2,000 KW (2,682 HP) and a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

(f) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE to the certification emission standards and other requirements applicable to Tier 3 new marine CI engines in 40 CFR 1042.101, 40 CFR 1042.107, 40 CFR 1042.115, 40 CFR 1042.120, and 40 CFR 1042.145, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2013 model year and later emergency stationary CI ICE with a maximum engine power less than 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

(2) Their 2014 model year and later emergency stationary CI ICE with a maximum engine power less than 2,000 KW (2,682 HP) and a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

(g) Notwithstanding the requirements in paragraphs (a) through (d) of this section, stationary emergency CI ICE identified in paragraphs (a) and (c) of this section may be certified to the provisions of 40 CFR part 1042 for commercial engines that are applicable for the engine's model year, displacement, power density, and maximum engine power if the engines will be used solely in either or both of the locations identified in paragraphs (g)(1) and (2) of this section. Engines that would be subject to the Tier 4 standards in 40 CFR part 1042 that are used solely in either or both of the locations identified in paragraphs (g)(1) and (2) of this section may instead continue to be certified to the appropriate Tier 3 standards in 40 CFR part 1042.

(1) Remote areas of Alaska; and

(2) Marine offshore installations.

(h) Notwithstanding the requirements in paragraphs (a) through (f) of this section, stationary CI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (f) of this section that are applicable to the model year, maximum engine power and displacement of the reconstructed emergency stationary CI ICE.

§ 60.4203 How long must my engines meet the emission standards if I am a manufacturer of stationary CI internal combustion engines?

Engines manufactured by stationary CI internal combustion engine manufacturers must meet the emission standards as required in §§ 60.4201 and 60.4202 during the certified emissions life of the engines.

Emission Standards for Owners and Operators

§ 60.4204 What emission standards must I meet for non-emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of less than 10 liters per cylinder must comply with the emission standards in table 1 to this subpart. Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder must comply with the Tier 1 emission standards in 40 CFR part 1042, appendix I.

(b) Owners and operators of 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in § 60.4201 for their 2007 model year and later stationary CI ICE, as applicable.

(c) Owners and operators of non-emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder must meet the following requirements:

(1) For engines installed prior to January 1, 2012, limit the emissions of NO_X in the stationary CI internal combustion engine exhaust to the following:

(i) 17.0 grams per kilowatt-hour (g/KW-hr) (12.7 grams per horsepower-hr (g/HP-hr)) when maximum engine speed is less than 130 revolutions per minute (rpm);

(ii) $45 \cdot n^{-0.2}$ g/KW-hr ($34 \cdot n^{-0.2}$ g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and

(iii) 9.8 g/KW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.

(2) For engines installed on or after January 1, 2012 and before January 1, 2016, limit the emissions of NO_X in the stationary CI internal combustion engine exhaust to the following:

(i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $44 \cdot n^{-0.23}$ g/KW-hr ($33 \cdot n^{-0.23}$ g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and

(iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.

(3) For engines installed on or after January 1, 2016, limit the emissions of NO_X in the stationary CI internal combustion engine exhaust to the following:

(i) 3.4 g/KW-hr (2.5 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $9.0 \cdot n^{-0.20}$ g/KW-hr ($6.7 \cdot n^{-0.20}$ g/HP-hr) where n (maximum engine speed) is 130 or more but less than 2,000 rpm; and

(iii) 2.0 g/KW-hr (1.5 g/HP-hr) where maximum engine speed is greater than or equal to 2,000 rpm.

(4) Reduce particulate matter (PM) emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW-hr (0.11 g/HP-hr).

(d) Owners and operators of non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the not-to-exceed (NTE) standards as indicated in § 60.4212.

(e) Owners and operators of any modified or reconstructed non-emergency stationary CI ICE subject to this subpart must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed non-emergency stationary CI ICE that are specified in paragraphs (a) through (d) of this section.

(f) Owners and operators of stationary CI ICE certified to the standards in 40 CFR part 1039 and equipped with AECDs as specified in 40 CFR 1039.665 must meet the Tier 1 certification emission standards for new nonroad CI engines in 40 CFR part 1039, appendix I, while the AECD is activated during a qualified emergency situation. A qualified emergency situation is defined in 40 CFR 1039.665. When the qualified emergency situation has ended and the AECD is deactivated, the engine must resume meeting the otherwise applicable emission standard specified in this section.

§ 60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of less than 10 liters per cylinder that are not fire pump engines must comply with the emission standards in Table 1 to this subpart. Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines must comply with the Tier 1 emission standards in 40 CFR part 1042, appendix I.

(b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in § 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

(c) Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants.

(d) Owners and operators of emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in this section.

(1) For engines installed prior to January 1, 2012, limit the emissions of NO_X in the stationary CI internal combustion engine exhaust to the following:

(i) 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $45 \cdot n^{-0.2}$ g/KW-hr ($34 \cdot n^{-0.2}$ g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and

(iii) 9.8 g/kW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.

(2) For engines installed on or after January 1, 2012, limit the emissions of NO_X in the stationary CI internal combustion engine exhaust to the following:

(i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $44 \cdot n^{-0.23}$ g/KW-hr ($33 \cdot n^{-0.23}$ g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and

(iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.

(3) Limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.40 g/KW-hr (0.30 g/HP-hr).

(e) Owners and operators of emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the NTE standards as indicated in § 60.4212.

(f) Owners and operators of any modified or reconstructed emergency stationary CI ICE subject to this subpart must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed CI ICE that are specified in paragraphs (a) through (e) of this section.

§ 60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§ 60.4204 and 60.4205 over the entire life of the engine.

Fuel Requirements for Owners and Operators

§ 60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

(a) [Reserved]

(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.

(c) [Reserved]

(d) Beginning June 1, 2012, owners and operators of stationary CI ICE subject to this subpart with a displacement of greater than or equal to 30 liters per cylinder must use diesel fuel that meets a maximum per-gallon sulfur content of 1,000 parts per million (ppm).

(e) Stationary CI ICE that have a national security exemption under § 60.4200(d) are also exempt from the fuel requirements in this section.

Other Requirements for Owners and Operators

§ 60.4208 What is the deadline for importing or installing stationary CI ICE produced in previous model years?

(a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.

(b) After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year engines.

(c) After December 31, 2014, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 19 KW (25 HP) and less than 56 KW (75 HP) that do not meet the applicable requirements for 2013 model year non-emergency engines.

(d) After December 31, 2013, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 56 KW (75 HP) and less than 130 KW (175 HP) that do not meet the applicable requirements for 2012 model year non-emergency engines.

(e) After December 31, 2012, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above 560 KW (750 HP), that do not meet the applicable requirements for 2011 model year non-emergency engines.

(f) After December 31, 2016, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 560 KW (750 HP) that do not meet the applicable requirements for 2015 model year non-emergency engines.

(g) After December 31, 2018, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power greater than or equal to 600 KW (804 HP) and less than 2,000 KW (2,680 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that do not meet the applicable requirements for 2017 model year non-emergency engines.

(h) In addition to the requirements specified in §§ 60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (g) of this section after the dates specified in paragraphs (a) through (g) of this section.

(i) The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

§ 60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in § 60.4211.

(a) If you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.

(b) If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in § 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

Compliance Requirements

§ 60.4210 What are my compliance requirements if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of less than 10 liters per cylinder to the emission standards specified in §§ 60.4201(a) through (c) and 60.4202(a), (b), and (d) using the certification procedures required in 40 CFR part 1039, subpart C, and must test their engines as specified in 40 CFR part 1039. For the purposes of this subpart, engines certified to the standards in Table 1 to this subpart shall be subject to the same certification procedures required for engines certified to the Tier 1 standards in 40 CFR part 1039, appendix I. For the purposes of this subpart, engines certified to the standards in Table 4 to this subpart shall be subject to the same certification procedures required for engines certified to the Tier 1 standards in 40 CFR part 1039, appendix I, except that engines with NFPA nameplate power of less than 37 KW (50 HP) certified to model year 2011 or later standards shall be subject to the same requirements as engines certified to the standards in 40 CFR part 1039.

(b) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder to the emission standards specified in §§ 60.4201(d) and (e) and 60.4202(e) and (f) using the certification procedures required in 40 CFR part 1042, subpart C, and must test their engines as specified in 40 CFR part 1042.

(c) Stationary CI internal combustion engine manufacturers must meet the requirements of 40 CFR 1039.120, 1039.125, 1039.130, and 1039.135 and 40 CFR part 1068 for engines that are certified to the emission standards in 40 CFR part 1039. Stationary CI internal combustion engine manufacturers must meet the corresponding provisions of 40 CFR part 1042 for engines that would be covered by that part if they were nonroad (including marine) engines. Labels on such engines must refer to stationary engines, rather than or in addition to nonroad or marine engines, as appropriate. Stationary CI internal combustion engine manufacturers must label their engines according to paragraphs (c)(1) through (3) of this section.

(1) Stationary CI internal combustion engines manufactured from January 1, 2006 to March 31, 2006 (January 1, 2006 to June 30, 2006 for fire pump engines), other than those that are part of certified engine families under the nonroad CI engine regulations, must be labeled according to 40 CFR 1039.20.

(2) Stationary CI internal combustion engines manufactured from April 1, 2006 to December 31, 2006 (or, for fire pump engines, July 1, 2006 to December 31 of the year preceding the year listed in table 3 to this subpart) must be labeled according to paragraphs (c)(2)(i) through (iii) of this section:

(i) Stationary CI internal combustion engines that are part of certified engine families under the nonroad regulations must meet the labeling requirements for nonroad CI engines, but do not have to meet the labeling requirements in 40 CFR 1039.20.

(ii) Stationary CI internal combustion engines that meet Tier 1 requirements (or requirements for fire pumps) under this subpart, but do not meet the requirements applicable to nonroad CI engines must be labeled according to 40 CFR 1039.20. The engine manufacturer may add language to the label clarifying that the engine meets Tier 1 requirements (or requirements for fire pumps) of this subpart.

(iii) Stationary CI internal combustion engines manufactured after April 1, 2006 that do not meet Tier 1 requirements of this subpart, or fire pumps engines manufactured after July 1, 2006 that do not meet the requirements for fire pumps under this subpart, may not be used in the U.S. If any such engines are manufactured in the U.S. after April 1, 2006 (July 1, 2006 for fire pump engines), they must be exported or must be brought into compliance with the appropriate standards prior to initial operation. The export provisions of 40 CFR 1068.230 would apply to engines for export and the manufacturers must label such engines according to 40 CFR 1068.230.

(3) Stationary CI internal combustion engines manufactured after January 1, 2007 (for fire pump engines, after January 1 of the year listed in table 3 to this subpart, as applicable) must be labeled according to paragraphs (c)(3)(i) through (iii) of this section.

(i) Stationary CI internal combustion engines that meet the requirements of this subpart and the corresponding requirements for nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in 40 CFR part 1039 or 1042, as appropriate.

(ii) Stationary CI internal combustion engines that meet the requirements of this subpart, but are not certified to the standards applicable to nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in 40 CFR part 1039 or 1042, as appropriate, but the words “stationary” must be included instead of “nonroad” or “marine” on the label. In addition, such engines must be labeled according to 40 CFR 1039.20.

(iii) Stationary CI internal combustion engines that do not meet the requirements of this subpart must be labeled according to 40 CFR 1068.230 and must be exported under the provisions of 40 CFR 1068.230.

(d) An engine manufacturer certifying an engine family or families to standards under this subpart that are identical to standards applicable under 40 CFR part 1039 or 1042 for that model year may certify any such family that contains both nonroad (including marine) and stationary engines as a single engine family and/or may include any such family containing stationary engines in the averaging, banking, and trading provisions applicable for such engines under those parts.

(e) Manufacturers of engine families discussed in paragraph (d) of this section may meet the labeling requirements referred to in paragraph (c) of this section for stationary CI ICE by either adding a separate label containing the information required in paragraph (c) of this section or by adding the words “and stationary” after the word “nonroad” or “marine,” as appropriate, to the label.

(f) Starting with the model years shown in table 5 to this subpart, stationary CI internal combustion engine manufacturers must add a permanent label stating that the engine is for stationary emergency use only to each new emergency stationary CI internal combustion engine greater than or equal to 19 KW (25 HP) that meets all the emission standards for emergency engines in § 60.4202 but does not meet all the emission standards for

non-emergency engines in § 60.4201. The label must be added according to the labeling requirements specified in 40 CFR 1039.135(b). Engine manufacturers must specify in the owner's manual that operation of emergency engines is limited to emergency operations and required maintenance and testing.

(g) Manufacturers of fire pump engines may use the test cycle in table 6 to this subpart for testing fire pump engines and may test at the NFPA certified nameplate HP, provided that the engine is labeled as “Fire Pump Applications Only”.

(h) Engine manufacturers, including importers, may introduce into commerce uncertified engines or engines certified to earlier standards that were manufactured before the new or changed standards took effect until inventories are depleted, as long as such engines are part of normal inventory. For example, if the engine manufacturers' normal industry practice is to keep on hand a one-month supply of engines based on its projected sales, and a new tier of standards starts to apply for the 2009 model year, the engine manufacturer may manufacture engines based on the normal inventory requirements late in the 2008 model year, and sell those engines for installation. The engine manufacturer may not circumvent the provisions of § 60.4201 or § 60.4202 by stockpiling engines that are built before new or changed standards take effect. Stockpiling of such engines beyond normal industry practice is a violation of this subpart.

(i) The replacement engine provisions of 40 CFR 1068.240 are applicable to stationary CI engines replacing existing equipment that is less than 15 years old.

(j) Stationary CI ICE manufacturers may equip their stationary CI internal combustion engines certified to the emission standards in 40 CFR part 1039 with AECDs for qualified emergency situations according to the requirements of 40 CFR 1039.665. Manufacturers of stationary CI ICE equipped with AECDs as allowed by 40 CFR 1039.665 must meet all the requirements in 40 CFR 1039.665 that apply to manufacturers. Manufacturers must document that the engine complies with the Tier 1 standard in 40 CFR part 1039, appendix I, when the AECD is activated. Manufacturers must provide any relevant testing, engineering analysis, or other information in sufficient detail to support such statement when applying for certification (including amending an existing certificate) of an engine equipped with an AECD as allowed by 40 CFR 1039.665.

(k) Manufacturers of any size may certify their emergency stationary CI internal combustion engines under this section using assigned deterioration factors established by EPA, consistent with 40 CFR 1039.240 and 1042.240.

§ 60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under paragraph (g) of this section:

(1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;

(2) Change only those emission-related settings that are permitted by the manufacturer; and

(3) Meet the requirements of 40 CFR part 1068, as they apply to you.

(b) If you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in § 60.4204(a) or § 60.4205(a), or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to this subpart and must comply with the emission standards specified in § 60.4205(c), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) through (5) of this section.

(1) Purchasing an engine certified to emission standards for the same model year and maximum engine power as described in 40 CFR parts 1039 and 1042, as applicable. The engine must be installed and configured according to the manufacturer's specifications.

(2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

(3) Keeping records of engine manufacturer data indicating compliance with the standards.

(4) Keeping records of control device vendor data indicating compliance with the standards.

(5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in § 60.4212, as applicable.

(c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in § 60.4204(b) or § 60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in § 60.4205(c), you must comply by purchasing an engine certified to the emission standards in § 60.4204(b), or § 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph (g) of this section.

(d) If you are an owner or operator and must comply with the emission standards specified in § 60.4204(c) or § 60.4205(d), you must demonstrate compliance according to the requirements specified in paragraphs (d)(1) through (3) of this section.

(1) Conducting an initial performance test to demonstrate initial compliance with the emission standards as specified in § 60.4213.

(2) Establishing operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in paragraphs (d)(2)(i) through (v) of this section.

(i) Identification of the specific parameters you propose to monitor continuously;

(ii) A discussion of the relationship between these parameters and NO_X and PM emissions, identifying how the emissions of these pollutants change with changes in these parameters, and how limitations on these parameters will serve to limit NO_X and PM emissions;

(iii) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(iv) A discussion identifying the methods and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(v) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(3) For non-emergency engines with a displacement of greater than or equal to 30 liters per cylinder, conducting annual performance tests to demonstrate continuous compliance with the emission standards as specified in § 60.4213.

(e) If you are an owner or operator of a modified or reconstructed stationary CI internal combustion engine and must comply with the emission standards specified in § 60.4204(e) or § 60.4205(f), you must demonstrate compliance according to one of the methods specified in paragraphs (e)(1) or (2) of this section.

(1) Purchasing, or otherwise owning or operating, an engine certified to the emission standards in § 60.4204(e) or § 60.4205(f), as applicable.

(2) Conducting a performance test to demonstrate initial compliance with the emission standards according to the requirements specified in § 60.4212 or § 60.4213, as appropriate. The test must be conducted within 60 days after the engine commences operation after the modification or reconstruction.

(f) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3), is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary ICE in emergency situations.

(2) You may operate your emergency stationary ICE for the purpose specified in paragraph (f)(2)(i) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(ii) [reserved]

(iii) [reserved]

(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

(ii) [Reserved]

(g) If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:

(1) If you are an owner or operator of a stationary CI internal combustion engine with maximum engine power less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if you do not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

(2) If you are an owner or operator of a stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.

(3) If you are an owner or operator of a stationary CI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

(h) The requirements for operators and prohibited acts specified in 40 CFR 1039.665 apply to owners or operators of stationary CI ICE equipped with AECDs for qualified emergency situations as allowed by 40 CFR 1039.665.

Testing Requirements for Owners and Operators

§ 60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (e) of this section.

(a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F, for stationary CI ICE with a displacement of less than 10 liters per cylinder, and according to 40 CFR part 1042, subpart F, for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder. Alternatively, stationary CI ICE that are complying with Tier 2 or Tier 3 emission standards as described in 40 CFR part 1039, appendix I, or with Tier 2 emission standards as described in 40 CFR part 1042, appendix I, may follow the testing procedures specified in § 60.4213, as appropriate.

(b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.

(c) Exhaust emissions from stationary CI ICE subject to Tier 2 or Tier 3 emission standards as described in 40 CFR part 1039, appendix I, or Tier 2 emission standards as described in 40 CFR part 1042, appendix I, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard, determined from the following equation:

$$\text{NTE requirement for each pollutant} = (1.25) \times (\text{STD}) \quad \text{(Eq. 1)}$$

Where:

STD = The standard specified for that pollutant in 40 CFR part 1039 or 1042, as applicable.

(d) Exhaust emissions from stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in § 60.4204(a), § 60.4205(a), or § 60.4205(c) must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in § 60.4204(a), § 60.4205(a), or § 60.4205(c), determined from the equation in paragraph (c) of this section.

Where:

STD = The standard specified for that pollutant in § 60.4204(a), § 60.4205(a), or § 60.4205(c).

Alternatively, stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in § 60.4204(a), § 60.4205(a), or § 60.4205(c) may follow the testing procedures specified in § 60.4213, as appropriate.

(e) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1042 must not exceed the NTE standards for the same model year and maximum engine power as required in 40 CFR 1042.101(c).

§ 60.4213 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of greater than or equal to 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must conduct performance tests according to paragraphs (a) through (f) of this section.

(a) Each performance test must be conducted according to the requirements in § 60.8 and under the specific conditions that this subpart specifies in table 7. The test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load.

(b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in § 60.8(c).

(c) You must conduct three separate test runs for each performance test required in this section, as specified in § 60.8(f). Each test run must last at least 1 hour.

(d) To determine compliance with the percent reduction requirement, you must follow the requirements as specified in paragraphs (d)(1) through (3) of this section.

(1) You must use Equation 2 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \qquad \text{(Eq. 2)}$$

Where:

C_i = concentration of NO_X or PM at the control device inlet,

C_o = concentration of NO_X or PM at the control device outlet, and

R = percent reduction of NO_X or PM emissions.

(2) You must normalize the NO_X or PM concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen (O_2) using Equation 3 of this section, or an equivalent percent carbon dioxide (CO_2) using the procedures described in paragraph (d)(3) of this section.

$$C_{adj} = C_d \frac{5.9}{20.9 - \%\ O_2} \qquad \text{(Eq. 3)}$$

Where:

C_{adj} = Calculated NO_X or PM concentration adjusted to 15 percent O_2.

C_d = Measured concentration of NO_X or PM, uncorrected.

5.9 = 20.9 percent O_2−15 percent O_2, the defined O_2 correction value, percent.

$\%O_2$ = Measured O_2 concentration, dry basis, percent.

(3) If pollutant concentrations are to be corrected to 15 percent O_2 and CO_2 concentration is measured in lieu of O_2 concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described in paragraphs (d)(3)(i) through (iii) of this section.

(i) Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209_{F_d}}{F_c} \qquad \text{(Eq. 4)}$$

Where:

F_o = Fuel factor based on the ratio of O_2 volume to the ultimate CO_2 volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is O_2, percent/100.

F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm^3/J ($dscf/10^6$ Btu).

F_c = Ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, dsm^3/J ($dscf/10^6$ Btu).

(ii) Calculate the CO_2 correction factor for correcting measurement data to 15 percent O_2, as follows:

$$X_{CO_2} = \frac{5.9}{F_o} \qquad \text{(Eq. 5)}$$

Where:

X_{CO2} = CO_2 correction factor, percent.

5.9 = 20.9 percent O_2−15 percent O_2, the defined O_2 correction value, percent.

(iii) Calculate the NO_X and PM gas concentrations adjusted to 15 percent O_2 using CO_2 as follows:

$$C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2} \qquad \text{(Eq. 6)}$$

Where:

C_{adj} = Calculated NO_X or PM concentration adjusted to 15 percent O_2.

C_d = Measured concentration of NO_X or PM, uncorrected.

$\%CO_2$ = Measured CO_2 concentration, dry basis, percent.

(e) To determine compliance with the NO_X mass per unit output emission limitation, convert the concentration of NO_X in the engine exhaust using Equation 7 of this section:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{\text{KW-hour}} \qquad \text{(Eq. 7)}$$

Where:

ER = Emission rate in grams per KW-hour.

C_d = Measured NO_X concentration in ppm.

$1.912x10^{-3}$ = Conversion constant for ppm NO_X to grams per standard cubic meter at 25 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Brake work of the engine, in KW-hour.

(f) To determine compliance with the PM mass per unit output emission limitation, convert the concentration of PM in the engine exhaust using Equation 8 of this section:

$$ER = \frac{C_{adj} \times Q \times T}{\text{KW-hour}} \qquad \text{(Eq. 8)}$$

Where:

ER = Emission rate in grams per KW-hour.

C_{adj} = Calculated PM concentration in grams per standard cubic meter.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Energy output of the engine, in KW.

Notification, Reports, and Records for Owners and Operators

§ 60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must meet the requirements of paragraphs (a)(1) and (2) of this section.

(1) Submit an initial notification as required in § 60.7(a)(1). The notification must include the information in paragraphs (a)(1)(i) through (v) of this section.

(i) Name and address of the owner or operator;

(ii) The address of the affected source;

(iii) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

(iv) Emission control equipment; and

(v) Fuel used.

(2) Keep records of the information in paragraphs (a)(2)(i) through (iv) of this section.

(i) All notifications submitted to comply with this subpart and all documentation supporting any notification.

(ii) Maintenance conducted on the engine.

(iii) If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.

(iv) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.

(b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

(c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

(d) If you own or operate an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates for the purpose specified in § 60.4211(f)(3)(i), you must submit an annual report according to the requirements in paragraphs (d)(1) through (3) of this section.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

(ii) Date of the report and beginning and ending dates of the reporting period.

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) [reserved]

(vi) [reserved]

(vii) Hours spent for operation for the purposes specified in § 60.4211(f)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in § 60.4211(f)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in § 60.4.

(e) Owners or operators of stationary CI ICE equipped with AECDs pursuant to the requirements of 40 CFR 1039.665 must report the use of AECDs as required by 40 CFR 1039.665(e).

(f) Beginning on February 26, 2025, within 60 days after the date of completing each performance test required by this subpart, you must submit the results of the performance test required under this section following the procedures specified in paragraphs (f)(1) and (2) of this section.

(1) *Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert) at the time of the test.* Submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), according to paragraph (g) of this section. The data must be submitted in a file format generated using the EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.

(2) *Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test.* The results of the performance test must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI according to paragraph (g) of this section.

(g) If you are required to submit notifications or reports following the procedure specified in this paragraph (g), you must submit notifications or reports to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). The EPA will make all the information submitted through CEDRI available to the public without further notice to you. Do not use CEDRI to submit information you claim as CBI. Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim for some of the information in the report or notification, you must submit a complete file in the format specified in this subpart, including information claimed to be CBI, to the EPA following the procedures in paragraphs (g)(1) and (2) of this section. Clearly mark the part or all of the information that you claim to be CBI. Information not marked as CBI may be authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. All CBI claims must be asserted at the time of submission. Anything submitted using CEDRI cannot later be claimed CBI. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available. You must submit the same file submitted to the CBI office with the CBI omitted to the EPA via the EPA's CDX as described earlier in this paragraph (g).

(1) The preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol, or other online file sharing services. Electronic submissions must be transmitted directly to the OAQPS CBI Office at the email address *oaqpscbi@epa.gov,* and as described in paragraph (g) of this section, should include clear CBI markings. ERT files should be flagged to the attention of the Group Leader, Measurement Policy Group; all other files should be flagged to the attention of the Stationary Compression Ignition Internal Combustion Engine Sector Lead. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if you do not have your own file sharing service, please email *oaqpscbi@epa.gov* to request a file transfer link.

(2) If you cannot transmit the file electronically, you may send CBI information through the postal service to the following address: OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, 109 T.W. Alexander Drive, P.O. Box 12055, Research Triangle Park, North Carolina 27711. ERT files should be sent to the attention of the Group Leader, Measurement Policy Group, and all other files should be sent to the attention of the Stationary Compression Ignition Internal Combustion Engine Sector Lead. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope.

(h) If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of EPA system outage for failure to timely comply with that reporting requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in paragraphs (h)(1) through (7) of this section.

(1) You must have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either the EPA's CEDRI or CDX systems.

(2) The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due.

(3) The outage may be planned or unplanned.

(4) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(5) You must provide to the Administrator a written description identifying:

(i) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage;

(iii) A description of measures taken or to be taken to minimize the delay in reporting; and

(iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(6) The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(7) In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved.

(i) If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of force majeure for failure to timely comply with that reporting requirement. To assert a claim of force majeure, you must meet the requirements outlined in paragraphs (i)(1) through (5) of this section.

(1) You may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date

the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (*e.g.,* hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (*e.g.,* large scale power outage).

(2) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(3) You must provide to the Administrator:

(i) A written description of the force majeure event;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event;

(iii) A description of measures taken or to be taken to minimize the delay in reporting; and

(iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(4) The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(5) In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs.

(j) Any records required to be maintained by this subpart that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

Special Requirements

§ 60.4215 What requirements must I meet for engines used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands?

(a) Stationary CI ICE with a displacement of less than 30 liters per cylinder that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the applicable emission standards in §§ 60.4202 and 60.4205.

(b) Stationary CI ICE that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are not required to meet the fuel requirements in § 60.4207.

(c) Stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the following emission standards:

(1) For engines installed prior to January 1, 2012, limit the emissions of NO_X in the stationary CI internal combustion engine exhaust to the following:

(i) 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $45 \cdot n^{-0.2}$ g/KW-hr ($34 \cdot n^{-0.2}$ g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and

(iii) 9.8 g/KW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.

(2) For engines installed on or after January 1, 2012, limit the emissions of NO_X in the stationary CI internal combustion engine exhaust to the following:

(i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $44 \cdot n^{-0.23}$ g/KW-hr ($33 \cdot n^{-0.23}$ g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and

(iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.

(3) Limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.40 g/KW-hr (0.30 g/HP-hr).

§ 60.4216 What requirements must I meet for engines used in Alaska?

(a) Prior to December 1, 2010, owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder located in areas of Alaska not accessible by the FAHS should refer to 40 CFR part 69 to determine the diesel fuel requirements applicable to such engines.

(b) Except as indicated in paragraph (c) of this section, manufacturers, owners and operators of stationary CI ICE with a displacement of less than 10 liters per cylinder located in remote areas of Alaska may meet the requirements of this subpart by manufacturing and installing engines meeting the Tier 2 or Tier 3 emission standards described in 40 CFR part 1042 for the same model year, displacement, and maximum engine power, as appropriate, rather than the otherwise applicable requirements of 40 CFR part 1039, as indicated in §§ 60.4201(f) and 60.4202(g).

(c) Manufacturers, owners, and operators of stationary CI ICE that are located in remote areas of Alaska may choose to meet the applicable emission standards for emergency engines in §§ 60.4202 and 60.4205, and not those for non-emergency engines in §§ 60.4201 and 60.4204, except that for 2014 model year and later nonemergency CI ICE, the owner or operator of any such engine must have that engine certified as meeting at least the Tier 3 PM standards identified in appendix I of 40 CFR part 1039 or in 40 CFR 1042.101.

(d) The provisions of § 60.4207 do not apply to owners and operators of pre-2014 model year stationary CI ICE subject to this subpart that are located in remote areas of Alaska.

(e) The provisions of § 60.4208(a) do not apply to owners and operators of stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the FAHS until after December 31, 2009.

(f) The provisions of this section and § 60.4207 do not prevent owners and operators of stationary CI ICE subject to this subpart that are located in remote areas of Alaska from using fuels mixed with used lubricating oil, in volumes of up to 1.75 percent of the total fuel. The sulfur content of the used lubricating oil must be less than 200 parts per million. The used lubricating oil must meet the on-specification levels and properties for used oil in 40 CFR 279.11.

§ 60.4217 What emission standards must I meet if I am an owner or operator of a stationary internal combustion engine using special fuels?

Owners and operators of stationary CI ICE that do not use diesel fuel may petition the Administrator for approval of alternative emission standards, if they can demonstrate that they use a fuel that is not the fuel on which the manufacturer of the engine certified the engine and that the engine cannot meet the applicable standards required in § 60.4204 or § 60.4205 using such fuels and that use of such fuel is appropriate and reasonably necessary, considering cost, energy, technical feasibility, human health and environmental, and other factors, for the operation of the engine.

General Provisions

§ 60.4218 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§ 60.1 through 60.19 apply to you.

Definitions

§ 60.4219 What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

Alaska Railbelt Grid means the service areas of the six regulated public utilities that extend from Fairbanks to Anchorage and the Kenai Peninsula. These utilities are Golden Valley Electric Association; Chugach Electric Association; Matanuska Electric Association; Homer Electric Association; Anchorage Municipal Light & Power; and the City of Seward Electric System.

Certified emissions life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for certified emissions life for stationary CI ICE with a displacement of less than 10 liters per cylinder are given in 40 CFR 1039.101(g). The values for certified emissions life for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder are given in 40 CFR 1042.101(e).

Combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Date of manufacture means one of the following things:

(1) For freshly manufactured engines and modified engines, date of manufacture means the date the engine is originally produced.

(2) For reconstructed engines, date of manufacture means the date the engine was originally produced, except as specified in paragraph (3) of this definition.

(3) Reconstructed engines are assigned a new date of manufacture if the fixed capital cost of the new and refurbished components exceeds 75 percent of the fixed capital cost of a comparable entirely new facility. An engine that is produced from a previously used engine block does not retain the date of manufacture of the engine in which the engine block was previously used if the engine is produced using all new components except for the engine block. In these cases, the date of manufacture is the date of reconstruction or the date the new engine is produced.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is number 2 distillate oil.

Diesel particulate filter means an emission control technology that reduces PM emissions by trapping the particles in a flow filter substrate and periodically removes the collected particles by either physical action or by oxidizing (burning off) the particles in a process called regeneration.

Emergency stationary internal combustion engine means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary ICE must comply with the requirements specified in § 60.4211(f) in order to be considered emergency stationary ICE. If the engine does not comply with the requirements specified in § 60.4211(f), then it is not considered to be an emergency stationary ICE under this subpart.

(1) The stationary ICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc.

(2) The stationary ICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in § 60.4211(f).

(3) The stationary ICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in § 60.4211(f)(3)(i).

Engine manufacturer means the manufacturer of the engine. See the definition of "manufacturer" in this section.

Fire pump engine means an emergency stationary internal combustion engine certified to NFPA requirements that is used to provide power to pump water for fire suppression or protection.

Freshly manufactured engine means an engine that has not been placed into service. An engine becomes freshly manufactured when it is originally produced.

Installed means the engine is placed and secured at the location where it is intended to be operated.

Manufacturer has the meaning given in section 216(1) of the Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new stationary engine into commerce in the United States. This includes importers who import stationary engines for sale or resale.

Maximum engine power means maximum engine power as defined in 40 CFR 1039.801.

Model year means the calendar year in which an engine is manufactured (see "date of manufacture"), except as follows:

(1) Model year means the annual new model production period of the engine manufacturer in which an engine is manufactured (see "date of manufacture"), if the annual new model production period is different than the calendar year and includes January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year.

(2) For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was manufactured (see "date of manufacture").

Other internal combustion engine means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.

Reciprocating internal combustion engine means any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work.

Remote areas of Alaska means areas of Alaska that meet either paragraph (1) or (2) of this definition.

(1) Areas of Alaska that are not accessible by the Federal Aid Highway System (FAHS).

(2) Areas of Alaska that meet all of the following criteria:

(i) The only connection to the FAHS is through the Alaska Marine Highway System, or the stationary CI ICE operation is within an isolated grid in Alaska that is not connected to the statewide electrical grid referred to as the Alaska Railbelt Grid.

(ii) At least 10 percent of the power generated by the stationary CI ICE on an annual basis is used for residential purposes.

(iii) The generating capacity of the source is less than 12 megawatts, or the stationary CI ICE is used exclusively for backup power for renewable energy.

Rotary internal combustion engine means any internal combustion engine which uses rotary motion to convert heat energy into mechanical work.

Spark ignition means relating to a gasoline, natural gas, or liquefied petroleum gas fueled engine or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle, aircraft, or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

Subpart means 40 CFR part 60, subpart IIII.

Table 1 to Subpart IIII of Part 60 - Emission Standards for Stationary Pre-2007 Model Year Engines With a Displacement of <10 Liters per Cylinder and 2007-2010 Model Year Engines >2,237 KW (3,000 HP) and With a Displacement of <10 Liters per Cylinder

[As stated in §§ 60.4201(b), 60.4202(b), 60.4204(a), and 60.4205(a), you must comply with the following emission standards]

Maximum engine power	**Emission standards for stationary pre-2007 model year engines with a displacement of <10 liters per cylinder and 2007-2010 model year engines >2,237 KW (3,000 HP) and with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)**				
	NMHC + NO_X	**HC**	**NO_X**	**CO**	**PM**
KW<8 (HP<11)	10.5 (7.8)			8.0 (6.0)	1.0 (0.75)
8≤KW<19 (11≤HP<25)	9.5 (7.1)			6.6 (4.9)	0.80 (0.60)
19≤KW<37 (25≤HP<50)	9.5 (7.1)			5.5 (4.1)	0.80 (0.60)
37≤KW<56 (50≤HP<75)			9.2 (6.9)		
56≤KW<75			9.2 (6.9)		

Maximum engine power	Emission standards for stationary pre-2007 model year engines with a displacement of <10 liters per cylinder and 2007-2010 model year engines >2,237 KW (3,000 HP) and with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)				
	NMHC + NO_X	**HC**	**NO_X**	**CO**	**PM**
(75≤HP<100)					
75≤KW<130 (100≤HP<175)			9.2 (6.9)		
130≤KW<225 (175≤HP<300)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
225≤KW<450 (300≤HP<600)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
450≤KW≤560 (600≤HP≤750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
KW>560 (HP>750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)

Table 2 to Subpart IIII of Part 60 - Emission Standards for 2008 Model Year and Later Emergency Stationary CI ICE <37 KW (50 HP) With a Displacement of <10 Liters per Cylinder

[As stated in § 60.4202(a)(1), you must comply with the following emission standards]

Engine power	Emission standards for 2008 model year and later emergency stationary CI ICE <37 KW (50 HP) with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)			
	Model year(s)	**NO_X + NMHC**	**CO**	**PM**
KW<8 (HP<11)	2008 +	7.5 (5.6)	8.0 (6.0)	0.40 (0.30)
8≤KW<19 (11≤HP<25)	2008 +	7.5 (5.6)	6.6 (4.9)	0.40 (0.30)
19≤KW<37 (25≤HP<50)	2008 +	7.5 (5.6)	5.5 (4.1)	0.30 (0.22)

Table 3 to Subpart IIII of Part 60 - Certification Requirements for Stationary Fire Pump Engines

As stated in § 60.4202(d), you must certify new stationary fire pump engines beginning with the following model years:

Engine power	Starting model year engine manufacturers must certify new stationary fire pump engines according to § 60.4202(d)[1]
KW<75 (HP<100)	2011

Engine power	Starting model year engine manufacturers must certify new stationary fire pump engines according to § 60.4202(d)[1]
75≤KW<130 (100≤HP<175)	2010
130≤KW≤560 (175≤HP≤750)	2009
KW>560 (HP>750)	2008

[1]Manufacturers of fire pump stationary CI ICE with a maximum engine power greater than or equal to 37 kW (50 HP) and less than 450 KW (600 HP) and a rated speed of greater than 2,650 revolutions per minute (rpm) are not required to certify such engines until three model years following the model year indicated in this Table 3 for engines in the applicable engine power category.

Table 4 to Subpart IIII of Part 60 - Emission Standards for Stationary Fire Pump Engines

[As stated in §§ 60.4202(d) and 60.4205(c), you must comply with the following emission standards for stationary fire pump engines]

Maximum engine power	Model year(s)	NMHC + NO_x	CO	PM
KW<8 (HP<11)	2010 and earlier	10.5 (7.8)	8.0 (6.0)	1.0 (0.75)
	2011 +	7.5 (5.6)		0.40 (0.30)
8≤KW<19 (11≤HP<25)	2010 and earlier	9.5 (7.1)	6.6 (4.9)	0.80 (0.60)
	2011 +	7.5 (5.6)		0.40 (0.30)
19≤KW<37 (25≤HP<50)	2010 and earlier	9.5 (7.1)	5.5 (4.1)	0.80 (0.60)
	2011 +	7.5 (5.6)		0.30 (0.22)
37≤KW<56 (50≤HP<75)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011 +[1]	4.7 (3.5)		0.40 (0.30)
56≤KW<75 (75≤HP<100)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011 +[1]	4.7 (3.5)		0.40 (0.30)
75≤KW<130 (100≤HP<175)	2009 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2010 +[2]	4.0 (3.0)		0.30 (0.22)
130≤KW<225 (175≤HP<300)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009 +[3]	4.0 (3.0)		0.20 (0.15)
225≤KW<450 (300≤HP<600)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)

Maximum engine power	Model year(s)	NMHC + NO_x	CO	PM
	2009 +[3]	4.0 (3.0)		0.20 (0.15)
450≤KW≤560 (600≤HP≤750)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009 +	4.0 (3.0)		0.20 (0.15)
KW>560 (HP>750)	2007 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2008 +	6.4 (4.8)		0.20 (0.15)

[1] For model years 2011-2013, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 revolutions per minute (rpm) may comply with the emission limitations for 2010 model year engines.

[2] For model years 2010-2012, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2009 model year engines.

[3] In model years 2009-2011, manufacturers of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2008 model year engines.

Table 5 to Subpart IIII of Part 60 - Labeling and Recordkeeping Requirements for New Stationary Emergency Engines

[You must comply with the labeling requirements in § 60.4210(f) and the recordkeeping requirements in § 60.4214(b) for new emergency stationary CI ICE beginning in the following model years:]

Engine power	Starting model year
19≤KW<56 (25≤HP<75)	2013
56≤KW<130 (75≤HP<175)	2012
KW≥130 (HP≥175)	2011

Table 6 to Subpart IIII of Part 60 - Optional 3-Mode Test Cycle for Stationary Fire Pump Engines

[As stated in § 60.4210(g), manufacturers of fire pump engines may use the following test cycle for testing fire pump engines:]

Mode No.	Engine speed[1]	Torque (percent)[2]	Weighting factors
1	Rated	100	0.30
2	Rated	75	0.50
3	Rated	50	0.20

[1] Engine speed: ±2 percent of point.

[2] Torque: NFPA certified nameplate HP for 100 percent point. All points should be ±2 percent of engine percent load value.

Table 7 to Subpart IIII of Part 60 - Requirements for Performance Tests for Stationary CI ICE With a Displacement of ≥30 Liters per Cylinder

As stated in § 60.4213, you must comply with the following requirements for performance tests for stationary CI ICE with a displacement of ≥30 liters per cylinder:

Each	Complying with the requirement to	You must	Using	According to the following requirements
1. Stationary CI internal combustion engine with a displacement of ≥ 30 liters per cylinder	a. Reduce NO_X emissions by 90 percent or more;	i. Select the sampling port location and number/location of traverse points at the inlet and outlet of the control device;		(a) For NO_X, O_2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter *and* the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A-1, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A-4.
		ii. Measure O_2 at the inlet and outlet of the control device;	(1) Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for NO_X concentration.
		iii. If necessary, measure moisture content at the inlet and outlet of the control device; and	(2) Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by	(c) Measurements to determine moisture content must be made at the same time as the measurements for NO_X concentration.

Each	Complying with the requirement to	You must	Using	According to the following requirements
			reference, see § 60.17)	
		iv. Measure NO_X at the inlet and outlet of the control device.	(3) Method 7E of 40 CFR part 60, appendix A-4, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see § 60.17)	(d) NO_X concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	b. Limit the concentration of NO_X in the stationary CI internal combustion engine exhaust.	i. Select the sampling port location and number/location of traverse points at the exhaust of the stationary internal combustion engine;		(a) For NO_X, O_2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter *and* the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A-1, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A-4.
		ii. Determine the O_2 concentration of the stationary internal combustion engine exhaust at the sampling port location;	(1) Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2	(b) Measurements to determine O_2 concentration must be made at the same time as the measurement for NO_X concentration.
		iii. If necessary, measure moisture content of the	(2) Method 4 of 40 CFR part 60,	(c) Measurements to determine moisture content must be made

Each	Complying with the requirement to	You must	Using	According to the following requirements
		stationary internal combustion engine exhaust at the sampling port location; and	appendix A-3, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see § 60.17)	at the same time as the measurement for NO_X concentration.
		iv. Measure NO_X at the exhaust of the stationary internal combustion engine; if using a control device, the sampling site must be located at the outlet of the control device.	(3) Method 7E of 40 CFR part 60, appendix A-4, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see § 60.17)	(d) NO_X concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	c. Reduce PM emissions by 60 percent or more	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A-1	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O_2 at the inlet and outlet of the control device;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for PM concentration.
		iii. If necessary, measure moisture content at the inlet and outlet of the control device; and	(3) Method 4 of 40 CFR part 60, appendix A-3	(c) Measurements to determine and moisture content must be made at the same time as the measurements for PM concentration.
		iv. Measure PM at the inlet and outlet of the control device.	(4) Method 5 of 40 CFR part 60, appendix A-3	(d) PM concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	d. Limit the concentration of PM in the	i. Select the sampling port location and the number of traverse	(1) Method 1 or 1A of 40 CFR part 60, appendix A-1	(a) If using a control device, the sampling site must be located at the outlet of the control device.

Each	Complying with the requirement to	You must	Using	According to the following requirements
	stationary CI internal combustion engine exhaust	points;		
		ii. Determine the O_2 concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for PM concentration.
		iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(3) Method 4 of 40 CFR part 60, appendix A-3	(c) Measurements to determine moisture content must be made at the same time as the measurements for PM concentration.
		iv. Measure PM at the exhaust of the stationary internal combustion engine.	(4) Method 5 of 40 CFR part 60, appendix A-3	(d) PM concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

Table 8 to Subpart IIII of Part 60 - Applicability of General Provisions to Subpart IIII

[As stated in § 60.4218, you must comply with the following applicable General Provisions:]

General Provisions citation	Subject of citation	Applies to subpart	Explanation
§ 60.1	General applicability of the General Provisions	Yes	
§ 60.2	Definitions	Yes	Additional terms defined in § 60.4219.
§ 60.3	Units and abbreviations	Yes	
§ 60.4	Address	Yes	
§ 60.5	Determination of construction or modification	Yes	
§ 60.6	Review of plans	Yes	

General Provisions citation	Subject of citation	Applies to subpart	Explanation
§ 60.7	Notification and Recordkeeping	Yes	Except that § 60.7 only applies as specified in § 60.4214(a).
§ 60.8	Performance tests	Yes	Except that § 60.8 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder and engines that are not certified.
§ 60.9	Availability of information	Yes	
§ 60.10	State Authority	Yes	
§ 60.11	Compliance with standards and maintenance requirements	No	Requirements are specified in subpart IIII.
§ 60.12	Circumvention	Yes	
§ 60.13	Monitoring requirements	Yes	Except that § 60.13 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder.
§ 60.14	Modification	Yes	
§ 60.15	Reconstruction	Yes	
§ 60.16	Priority list	Yes	
§ 60.17	Incorporations by reference	Yes	
§ 60.18	General control device requirements	No	
§ 60.19	General notification and reporting requirements	Yes	

Appendix N. 40 CFR pt. 63, subp. A—General Provisions

§ 63.1 Applicability.

(a) *General.*

(1) Terms used throughout this part are defined in § 63.2 or in the Clean Air Act (Act) as amended in 1990, except that individual subparts of this part may include specific definitions in addition to or that supersede definitions in § 63.2.

(2) This part contains national emission standards for hazardous air pollutants (NESHAP) established pursuant to section 112 of the Act as amended November 15, 1990. These standards regulate specific categories of stationary sources that emit (or have the potential to emit) one or more hazardous air pollutants listed in this part pursuant to section 112(b) of the Act. This section explains the applicability of such standards to sources affected by them. The standards in this part are independent of NESHAP contained in 40 CFR part 61. The NESHAP in part 61 promulgated by signature of the Administrator before November 15, 1990 (i.e., the date of enactment of the Clean Air Act Amendments of 1990) remain in effect until they are amended, if appropriate, and added to this part.

(3) No emission standard or other requirement established under this part shall be interpreted, construed, or applied to diminish or replace the requirements of a more stringent emission limitation or other applicable requirement established by the Administrator pursuant to other authority of the Act (section 111, part C or D or any other authority of this Act), or a standard issued under State authority. The Administrator may specify in a specific standard under this part that facilities subject to other provisions under the Act need only comply with the provisions of that standard.

(4) (i) Each relevant standard in this part 63 must identify explicitly whether each provision in this subpart A is or is not included in such relevant standard.

(ii) If a relevant part 63 standard incorporates the requirements of 40 CFR part 60, part 61 or other part 63 standards, the relevant part 63 standard must identify explicitly the applicability of each corresponding part 60, part 61, or other part 63 subpart A (General) provision.

(iii) The General Provisions in this subpart A do not apply to regulations developed pursuant to section 112(r) of the amended Act, unless otherwise specified in those regulations.

(5) [Reserved]

(6) To obtain the most current list of categories of sources to be regulated under section 112 of the Act, or to obtain the most recent regulation promulgation schedule established pursuant to section 112(e) of the Act, contact the Office of the Director, Emission Standards Division, Office of Air Quality Planning and Standards, U.S. EPA (MD-13), Research Triangle Park, North Carolina 27711.

(7)-(9) [Reserved]

(10) For the purposes of this part, time periods specified in days shall be measured in calendar days, even if the word “calendar” is absent, unless otherwise specified in an applicable requirement.

(11) For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, test plan, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information

required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery agreed to by the permitting authority, is acceptable.

(12) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. Procedures governing the implementation of this provision are specified in § 63.9(i).

(b) *Initial applicability determination for this part.*

(1) The provisions of this part apply to the owner or operator of any stationary source that -

(i) Emits or has the potential to emit any hazardous air pollutant listed in or pursuant to section 112(b) of the Act; and

(ii) Is subject to any standard, limitation, prohibition, or other federally enforceable requirement established pursuant to this part.

(2) [Reserved]

(3) An owner or operator of a stationary source who is in the relevant source category and who determines that the source is not subject to a relevant standard or other requirement established under this part must keep a record as specified in § 63.10(b)(3).

(c) *Applicability of this part after a relevant standard has been set under this part.*

(1) If a relevant standard has been established under this part, the owner or operator of an affected source must comply with the provisions of that standard and of this subpart as provided in paragraph (a)(4) of this section.

(2) Except as provided in § 63.10(b)(3), if a relevant standard has been established under this part, the owner or operator of an affected source may be required to obtain a title V permit from a permitting authority in the State in which the source is located. Emission standards promulgated in this part for area sources pursuant to section 112(c)(3) of the Act will specify whether -

(i) States will have the option to exclude area sources affected by that standard from the requirement to obtain a title V permit (i.e., the standard will exempt the category of area sources altogether from the permitting requirement);

(ii) States will have the option to defer permitting of area sources in that category until the Administrator takes rulemaking action to determine applicability of the permitting requirements; or

(iii) If a standard fails to specify what the permitting requirements will be for area sources affected by such a standard, then area sources that are subject to the standard will be subject to the requirement to obtain a title V permit without any deferral.

(3)-(4) [Reserved]

(5) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source that is subject to the emission standard or other requirement, such source also shall be subject to the notification requirements of this subpart.

(6) A major source may become an area source at any time upon reducing its emissions of and potential to emit hazardous air pollutants, as defined in this subpart, to below the major source thresholds established in § 63.2, subject to the provisions in paragraphs (c)(6)(i) and (ii) of this section.

(i) A major source reclassifying to area source status is subject to the applicability of standards, compliance dates and notification requirements specified in (c)(6)(i)(A) of this section. An area source that previously was a major source and becomes a major source again is subject to the applicability of standards, compliance dates, and notification requirements specified in (c)(6)(i)(B) of this section:

(A) A major source reclassifying to area source status under this part remains subject to any applicable major source requirements established under this part until the reclassification becomes effective. After the reclassification becomes effective, the source is subject to any applicable area source requirements established under this part immediately, provided the compliance date for the area source requirements has passed. The owner or operator of a major source that becomes an area source subject to newly applicable area source requirements under this part must comply with the initial notification requirements pursuant to § 63.9(b). The owner or operator of a major source that becomes an area source must also provide to the Administrator any change in the information already provided under § 63.9(b) per § 63.9(j).

(B) An area source that previously was a major source under this part and that becomes a major source again is subject to the applicable major source requirements established under this part immediately upon becoming a major source again, provided the compliance date for the major source requirements has passed, notwithstanding any provision within the applicable subparts. The owner or operator of an area source that becomes a major source again must comply with the initial notification pursuant to § 63.9(b). The owner or operator must also provide to the Administrator any change in the information already provided under § 63.9(b) per § 63.9(j).

(ii) Becoming an area source does not absolve a source subject to an enforcement action or investigation for major source violations or infractions from the consequences of any actions occurring when the source was major. Becoming a major source does not absolve a source subject to an enforcement action or investigation for area source violations or infractions from the consequences of any actions occurring when the source was an area source.

(iii) After September 10, 2024, affected sources subject to the following 40 CFR part 63 subparts on September 10, 2024, must remain subject to those subparts, and any modifications thereafter, even if the source becomes an area source by reducing both its actual emissions and potential to emit hazardous air pollutants to below major source thresholds: F, G, H, I, L, R, X, CC, GG, II, JJ, KK, LL, MM, EEE, JJJ, LLL, MMM, RRR, UUU, FFFF, JJJJ, MMMM, PPPP, ZZZZ, CCCCC, DDDDD, FFFFF, IIIII, LLLLL, YYYYY, JJJJJJ, EEEEEEE.

(d) [Reserved]

(e) If the Administrator promulgates an emission standard under section 112(d) or (h) of the Act that is applicable to a source subject to an emission limitation by permit established under section 112(j) of the Act, and the requirements under the section 112(j) emission limitation are substantially as effective as the promulgated emission standard, the owner or operator may request the permitting authority to revise the source's title V permit to reflect that the emission limitation in the permit satisfies the requirements of the promulgated emission standard. The process by which the permitting authority determines whether the section 112(j) emission limitation is substantially as effective as the promulgated emission standard must include, consistent with part 70 or 71 of this chapter, the opportunity for full public, EPA, and affected State review (including the opportunity for EPA's objection) prior to the permit revision being finalized. A negative determination by the permitting authority constitutes final action for purposes of review and appeal under the applicable title V operating permit program.

§ 63.2 Definitions.

The terms used in this part are defined in the Act or in this section as follows:

Act means the Clean Air Act (42 U.S.C. 7401 *et seq.,* as amended by Pub. L. 101-549, 104 Stat. 2399).

Actual emissions is defined in subpart D of this part for the purpose of granting a compliance extension for an early reduction of hazardous air pollutants.

Administrator means the Administrator of the United States Environmental Protection Agency or his or her authorized representative (e.g., a State that has been delegated the authority to implement the provisions of this part).

Affected source, for the purposes of this part, means the collection of equipment, activities, or both within a single contiguous area and under common control that is included in a section 112(c) source category or subcategory for which a section 112(d) standard or other relevant standard is established pursuant to section 112 of the Act. Each relevant standard will define the "affected source," as defined in this paragraph unless a different definition is warranted based on a published justification as to why this definition would result in significant administrative, practical, or implementation problems and why the different definition would resolve those problems. The term "affected source," as used in this part, is separate and distinct from any other use of that term in EPA regulations such as those implementing title IV of the Act. Affected source may be defined differently for part 63 than affected facility and stationary source in parts 60 and 61, respectively. This definition of "affected source," and the procedures for adopting an alternative definition of "affected source," shall apply to each section 112(d) standard for which the initial proposed rule is signed by the Administrator after June 30, 2002.

Alternative emission limitation means conditions established pursuant to sections 112(i)(5) or 112(i)(6) of the Act by the Administrator or by a State with an approved permit program.

Alternative emission standard means an alternative means of emission limitation that, after notice and opportunity for public comment, has been demonstrated by an owner or operator to the Administrator's satisfaction to achieve a reduction in emissions of any air pollutant at least equivalent to the reduction in emissions of such pollutant achieved under a relevant design, equipment, work practice, or operational emission standard, or combination thereof, established under this part pursuant to section 112(h) of the Act.

Alternative test method means any method of sampling and analyzing for an air pollutant that has been demonstrated to the Administrator's satisfaction, using Method 301 in appendix A of this part, to produce results adequate for the Administrator's determination that it may be used in place of a test method specified in this part.

Approved permit program means a State permit program approved by the Administrator as meeting the requirements of part 70 of this chapter or a Federal permit program established in this chapter pursuant to title V of the Act (42 U.S.C. 7661).

Area source means any stationary source of hazardous air pollutants that is not a major source as defined in this part.

Commenced means, with respect to construction or reconstruction of an affected source, that an owner or operator has undertaken a continuous program of construction or reconstruction or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or reconstruction.

Compliance date means the date by which an affected source is required to be in compliance with a relevant standard, limitation, prohibition, or any federally enforceable requirement established by the Administrator (or a State with an approved permit program) pursuant to section 112 of the Act.

Compliance schedule means:

(1) In the case of an affected source that is in compliance with all applicable requirements established under this part, a statement that the source will continue to comply with such requirements; or

(2) In the case of an affected source that is required to comply with applicable requirements by a future date, a statement that the source will meet such requirements on a timely basis and, if required by an applicable requirement, a detailed schedule of the dates by which each step toward compliance will be reached; or

(3) In the case of an affected source not in compliance with all applicable requirements established under this part, a schedule of remedial measures, including an enforceable sequence of actions or operations with milestones and a schedule for the submission of certified progress reports, where applicable, leading to compliance with a relevant standard, limitation, prohibition, or any federally enforceable requirement established pursuant to section 112 of the Act for which the affected source is not in compliance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based.

Construction means the on-site fabrication, erection, or installation of an affected source. Construction does not include the removal of all equipment comprising an affected source from an existing location and reinstallation of such equipment at a new location. The owner or operator of an existing affected source that is relocated may elect not to reinstall minor ancillary equipment including, but not limited to, piping, ductwork, and valves. However, removal and reinstallation of an affected source will be construed as reconstruction if it satisfies the criteria for reconstruction as defined in this section. The costs of replacing minor ancillary equipment must be considered in determining whether the existing affected source is reconstructed.

Continuous emission monitoring system (CEMS) means the total equipment that may be required to meet the data acquisition and availability requirements of this part, used to sample, condition (if applicable), analyze, and provide a record of emissions.

Continuous monitoring system (CMS) is a comprehensive term that may include, but is not limited to, continuous emission monitoring systems, continuous opacity monitoring systems, continuous parameter monitoring systems, or other manual or automatic monitoring that is used for demonstrating compliance with an applicable regulation on a continuous basis as defined by the regulation.

Continuous opacity monitoring system (COMS) means a continuous monitoring system that measures the opacity of emissions.

Continuous parameter monitoring system means the total equipment that may be required to meet the data acquisition and availability requirements of this part, used to sample, condition (if applicable), analyze, and provide a record of process or control system parameters.

Effective date means:

(1) With regard to an emission standard established under this part, the date of promulgation in the Federal Register of such standard; or

(2) With regard to an alternative emission limitation or equivalent emission limitation determined by the Administrator (or a State with an approved permit program), the date that the alternative emission limitation or equivalent emission limitation becomes effective according to the provisions of this part.

Emission standard means a national standard, limitation, prohibition, or other regulation promulgated in a subpart of this part pursuant to sections 112(d), 112(h), or 112(f) of the Act.

Emissions averaging is a way to comply with the emission limitations specified in a relevant standard, whereby an affected source, if allowed under a subpart of this part, may create emission credits by reducing emissions from specific points to a level below that required by the relevant standard, and those credits are used to offset emissions from points that are not controlled to the level required by the relevant standard.

EPA means the United States Environmental Protection Agency.

Equivalent emission limitation means any maximum achievable control technology emission limitation or requirements which are applicable to a major source of hazardous air pollutants and are adopted by the Administrator (or a State with an approved permit program) on a case-by-case basis, pursuant to section 112(g) or (j) of the Act.

Excess emissions and continuous monitoring system performance report is a report that must be submitted periodically by an affected source in order to provide data on its compliance with relevant emission limits, operating parameters, and the performance of its continuous parameter monitoring systems.

Existing source means any affected source that is not a new source.

Federally enforceable means all limitations and conditions that are enforceable by the Administrator and citizens under the Act or that are enforceable under other statutes administered by the Administrator. Examples of federally enforceable limitations and conditions include, but are not limited to:

(1) Emission standards, alternative emission standards, alternative emission limitations, and equivalent emission limitations established pursuant to section 112 of the Act as amended in 1990;

(2) New source performance standards established pursuant to section 111 of the Act, and emission standards established pursuant to section 112 of the Act before it was amended in 1990;

(3) All terms and conditions in a title V permit, including any provisions that limit a source's potential to emit, unless expressly designated as not federally enforceable;

(4) Limitations and conditions that are part of an approved State Implementation Plan (SIP) or a Federal Implementation Plan (FIP);

(5) Limitations and conditions that are part of a Federal construction permit issued under 40 CFR 52.21 or any construction permit issued under regulations approved by the EPA in accordance with 40 CFR part 51;

(6) Limitations and conditions that are part of an operating permit where the permit and the permitting program pursuant to which it was issued meet all of the following criteria:

(i) The operating permit program has been submitted to and approved by EPA into a State implementation plan (SIP) under section 110 of the CAA;

(ii) The SIP imposes a legal obligation that operating permit holders adhere to the terms and limitations of such permits and provides that permits which do not conform to the operating permit program requirements and the requirements of EPA's underlying regulations may be deemed not “federally enforceable” by EPA;

(iii) The operating permit program requires that all emission limitations, controls, and other requirements imposed by such permits will be at least as stringent as any other applicable limitations and requirements contained in the SIP or enforceable under the SIP, and that the program may not issue permits that waive, or make less stringent, any limitations or requirements contained in or issued pursuant to the SIP, or that are otherwise “federally enforceable”;

(iv) The limitations, controls, and requirements in the permit in question are permanent, quantifiable, and otherwise enforceable as a practical matter; and

(v) The permit in question was issued only after adequate and timely notice and opportunity for comment for EPA and the public.

(7) Limitations and conditions in a State rule or program that has been approved by the EPA under subpart E of this part for the purposes of implementing and enforcing section 112; and

(8) Individual consent agreements that the EPA has legal authority to create.

Fixed capital cost means the capital needed to provide all the depreciable components of an existing source.

Force majeure means, for purposes of § 63.7, an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents the owner or operator from complying with the regulatory requirement to conduct performance tests within the specified timeframe despite the affected facility's best efforts to fulfill the obligation. Examples of such events are acts of nature, acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility.

Fugitive emissions means those emissions from a stationary source that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. Under section 112 of the Act, all fugitive emissions are to be considered in determining whether a stationary source is a major source.

Hazardous air pollutant means any air pollutant listed in or pursuant to section 112(b) of the Act.

Issuance of a part 70 permit will occur, if the State is the permitting authority, in accordance with the requirements of part 70 of this chapter and the applicable, approved State permit program. When the EPA is the permitting authority, issuance of a title V permit occurs immediately after the EPA takes final action on the final permit.

Major source means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants, unless the Administrator establishes a lesser quantity, or in the case of radionuclides, different criteria from those specified in this sentence.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Monitoring means the collection and use of measurement data or other information to control the operation of a process or pollution control device or to verify a work practice standard relative to assuring compliance with applicable requirements. Monitoring is composed of four elements:

(1) Indicator(s) of performance - the parameter or parameters you measure or observe for demonstrating proper operation of the pollution control measures or compliance with the applicable emissions limitation or standard. Indicators of performance may include direct or predicted emissions measurements (including opacity), operational parametric values that correspond to process or control device (and capture system) efficiencies or emissions rates, and recorded findings of inspection of work practice activities, materials tracking, or design characteristics. Indicators may be expressed as a single maximum or minimum value, a function of process variables (for example, within a range of pressure drops), a particular operational or work practice status (for example, a damper position, completion of a waste recovery task, materials tracking), or an interdependency between two or among more than two variables.

(2) Measurement techniques - the means by which you gather and record information of or about the indicators of performance. The components of the measurement technique include the detector type, location and installation specifications, inspection procedures, and quality assurance and quality control measures. Examples of measurement techniques include continuous emission monitoring systems, continuous opacity monitoring systems, continuous parametric monitoring systems, and manual inspections that include making records of process conditions or work practices.

(3) Monitoring frequency - the number of times you obtain and record monitoring data over a specified time interval. Examples of monitoring frequencies include at least four points equally spaced for each hour for continuous emissions or parametric monitoring systems, at least every 10 seconds for continuous opacity

monitoring systems, and at least once per operating day (or week, month, etc.) for work practice or design inspections.

(4) Averaging time - the period over which you average and use data to verify proper operation of the pollution control approach or compliance with the emissions limitation or standard. Examples of averaging time include a 3-hour average in units of the emissions limitation, a 30-day rolling average emissions value, a daily average of a control device operational parametric range, and an instantaneous alarm.

New affected source means the collection of equipment, activities, or both within a single contiguous area and under common control that is included in a section 112(c) source category or subcategory that is subject to a section 112(d) or other relevant standard for new sources. This definition of "new affected source," and the criteria to be utilized in implementing it, shall apply to each section 112(d) standard for which the initial proposed rule is signed by the Administrator after June 30, 2002. Each relevant standard will define the term "new affected source," which will be the same as the "affected source" unless a different collection is warranted based on consideration of factors including:

(1) Emission reduction impacts of controlling individual sources versus groups of sources;

(2) Cost effectiveness of controlling individual equipment;

(3) Flexibility to accommodate common control strategies;

(4) Cost/benefits of emissions averaging;

(5) Incentives for pollution prevention;

(6) Feasibility and cost of controlling processes that share common equipment (e.g., product recovery devices);

(7) Feasibility and cost of monitoring; and

(8) Other relevant factors.

New source means any affected source the construction or reconstruction of which is commenced after the Administrator first proposes a relevant emission standard under this part establishing an emission standard applicable to such source.

One-hour period, unless otherwise defined in an applicable subpart, means any 60-minute period commencing on the hour.

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background. For continuous opacity monitoring systems, opacity means the fraction of incident light that is attenuated by an optical medium.

Owner or operator means any person who owns, leases, operates, controls, or supervises a stationary source.

Performance audit means a procedure to analyze blind samples, the content of which is known by the Administrator, simultaneously with the analysis of performance test samples in order to provide a measure of test data quality.

Performance evaluation means the conduct of relative accuracy testing, calibration error testing, and other measurements used in validating the continuous monitoring system data.

Performance test means the collection of data resulting from the execution of a test method (usually three emission test runs) used to demonstrate compliance with a relevant emission standard as specified in the performance test section of the relevant standard.

Permit modification means a change to a title V permit as defined in regulations codified in this chapter to implement title V of the Act (42 U.S.C. 7661).

Permit program means a comprehensive State operating permit system established pursuant to title V of the Act (42 U.S.C. 7661) and regulations codified in part 70 of this chapter and applicable State regulations, or a

comprehensive Federal operating permit system established pursuant to title V of the Act and regulations codified in this chapter.

Permit revision means any permit modification or administrative permit amendment to a title V permit as defined in regulations codified in this chapter to implement title V of the Act (42 U.S.C. 7661).

Permitting authority means:

(1) The State air pollution control agency, local agency, other State agency, or other agency authorized by the Administrator to carry out a permit program under part 70 of this chapter; or

(2) The Administrator, in the case of EPA-implemented permit programs under title V of the Act (42 U.S.C. 7661).

Pollution Prevention means *source reduction* as defined under the Pollution Prevention Act (42 U.S.C. 13101-13109). The definition is as follows:

(1) *Source reduction* is any practice that:

(i) Reduces the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment, or disposal; and

(ii) Reduces the hazards to public health and the environment associated with the release of such substances, pollutants, or contaminants.

(2) The term *source reduction* includes equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control.

(3) The term *source reduction* does not include any practice that alters the physical, chemical, or biological characteristics or the volume of a hazardous substance, pollutant, or contaminant through a process or activity which itself is not integral to and necessary for the production of a product or the providing of a service.

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is enforceable.

Reconstruction, unless otherwise defined in a relevant standard, means the replacement of components of an affected or a previously nonaffected source to such an extent that:

(1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source; and

(2) It is technologically and economically feasible for the reconstructed source to meet the relevant standard(s) established by the Administrator (or a State) pursuant to section 112 of the Act. Upon reconstruction, an affected source, or a stationary source that becomes an affected source, is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.

Regulation promulgation schedule means the schedule for the promulgation of emission standards under this part, established by the Administrator pursuant to section 112(e) of the Act and published in the Federal Register.

Relevant standard means:

(1) An emission standard;

(2) An alternative emission standard;

(3) An alternative emission limitation; or

(4) An equivalent emission limitation established pursuant to section 112 of the Act that applies to the collection of equipment, activities, or both regulated by such standard or limitation. A relevant standard may include or consist of a design, equipment, work practice, or operational requirement, or other measure, process, method, system, or technique (including prohibition of emissions) that the Administrator (or a State) establishes for new or existing sources to which such standard or limitation applies. Every relevant standard established pursuant to section 112 of the Act includes subpart A of this part, as provided by § 63.1(a)(4), and all applicable appendices of this part or of other parts of this chapter that are referenced in that standard.

Responsible official means one of the following:

(1) For a corporation: A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities and either:

(i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or

(ii) The delegation of authority to such representative is approved in advance by the Administrator.

(2) For a partnership or sole proprietorship: a general partner or the proprietor, respectively.

(3) For a municipality, State, Federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of the EPA).

(4) For affected sources (as defined in this part) applying for or subject to a title V permit: "responsible official" shall have the same meaning as defined in part 70 or Federal title V regulations in this chapter (42 U.S.C. 7661), whichever is applicable.

Run means one of a series of emission or other measurements needed to determine emissions for a representative operating period or cycle as specified in this part.

Shutdown means the cessation of operation of an affected source or portion of an affected source for any purpose.

Six-minute period means, with respect to opacity determinations, any one of the 10 equal parts of a 1-hour period.

Source at a Performance Track member facility means a major or area source located at a facility which has been accepted by EPA for membership in the Performance Track Program (as described at *www.epa.gov/PerformanceTrack*) and is still a member of the Program. The Performance Track Program is a voluntary program that encourages continuous environmental improvement through the use of environmental management systems, local community outreach, and measurable results.

Standard conditions means a temperature of 293 K (68 °F) and a pressure of 101.3 kilopascals (29.92 in. Hg).

Startup means the setting in operation of an affected source or portion of an affected source for any purpose.

State means all non-Federal authorities, including local agencies, interstate associations, and State-wide programs, that have delegated authority to implement:

(1) The provisions of this part and/or

(2) the permit program established under part 70 of this chapter. The term State shall have its conventional meaning where clear from the context.

Stationary source means any building, structure, facility, or installation which emits or may emit any air pollutant.

Test method means the validated procedure for sampling, preparing, and analyzing for an air pollutant specified in a relevant standard as the performance test procedure. The test method may include methods described in an appendix of this chapter, test methods incorporated by reference in this part, or methods validated for an application through procedures in Method 301 of appendix A of this part.

Title V permit means any permit issued, renewed, or revised pursuant to Federal or State regulations established to implement title V of the Act (42 U.S.C. 7661). A title V permit issued by a State permitting authority is called a part 70 permit in this part.

Visible emission means the observation of an emission of opacity or optical density above the threshold of vision.

Working day means any day on which Federal Government offices (or State government offices for a State that has obtained delegation under section 112(l)) are open for normal business. Saturdays, Sundays, and official Federal (or where delegated, State) holidays are not working days.

§ 63.3 Units and abbreviations.

Used in this part are abbreviations and symbols of units of measure. These are defined as follows:

(a) *System International (SI) units of measure:*

A = ampere

g = gram

Hz = hertz

J = joule

°K = degree Kelvin

kg = kilogram

l = liter

m = meter

m^3 = cubic meter

mg = milligram = 10^{-3} gram

ml = milliliter = 10^{-3} liter

mm = millimeter = 10^{-3} meter

Mg = megagram = 10^6 gram = metric ton

MJ = megajoule

mol = mole

N = newton

ng = nanogram = 10^{-9} gram

nm = nanometer = 10^{-9} meter

Pa = pascal

s = second

V = volt

W = watt

Ω = ohm

µg = microgram = 10^{-6} gram

µl = microliter = 10^{-6} liter

(b) *Other units of measure:*

Btu = British thermal unit

°C = degree Celsius (centigrade)

cal = calorie

cfm = cubic feet per minute

cc = cubic centimeter

cu ft = cubic feet

d = day

dcf = dry cubic feet

dcm = dry cubic meter

dscf = dry cubic feet at standard conditions

dscm = dry cubic meter at standard conditions

eq = equivalent

°F degree Fahrenheit

ft = feet

ft^2 = square feet

ft^3 = cubic feet

gal = gallon

gr = grain

g-eq = gram equivalent

g-mole = gram mole

hr = hour

in. = inch

in. H_2 O = inches of water

K = 1,000

kcal = kilocalorie

lb = pound

lpm = liter per minute

meq = milliequivalent

min = minute

MW = molecular weight

oz = ounces

ppb = parts per billion

ppbw = parts per billion by weight

ppbv = parts per billion by volume

ppm = parts per million

ppmw = parts per million by weight

ppmv = parts per million by volume

psia = pounds per square inch absolute

psig = pounds per square inch gage

°R = degree Rankine

scf = cubic feet at standard conditions

scfh = cubic feet at standard conditions per hour

scm = cubic meter at standard conditions

scmm = cubic meter at standard conditions per minute

sec = second

sq ft = square feet

std = at standard conditions

v/v = volume per volume

yd^2 = square yards

yr = year

(c) *Miscellaneous:*

act = actual

avg = average

I.D. = inside diameter

M = molar

N = normal

O.D. = outside diameter

% = percent

§ 63.4 Prohibited activities and circumvention.

(a) *Prohibited activities.*

(1) No owner or operator subject to the provisions of this part must operate any affected source in violation of the requirements of this part. Affected sources subject to and in compliance with either an extension of compliance or an exemption from compliance are not in violation of the requirements of this part. An extension of compliance can be granted by the Administrator under this part; by a State with an approved permit program; or by the President under section 112(i)(4) of the Act.

(2) No owner or operator subject to the provisions of this part shall fail to keep records, notify, report, or revise reports as required under this part.

(3)-(5) [Reserved]

(b) *Circumvention.* No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment, or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to -

(1) The use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere;

(2) The use of gaseous diluents to achieve compliance with a relevant standard for visible emissions; and

(c) *Fragmentation.* Fragmentation after November 15, 1990 which divides ownership of an operation, within the same facility among various owners where there is no real change in control, will not affect applicability. The owner and operator must not use fragmentation or phasing of reconstruction activities (i.e., intentionally dividing reconstruction into multiple parts for purposes of avoiding new source requirements) to avoid becoming subject to new source requirements.

§ 63.5 Preconstruction review and notification requirements.

(a) *Applicability.*

(1) This section implements the preconstruction review requirements of section 112(i)(1). After the effective date of a relevant standard, promulgated pursuant to section 112(d), (f), or (h) of the Act, under this part, the preconstruction review requirements in this section apply to the owner or operator of new affected sources and reconstructed affected sources that are major-emitting as specified in this section. New and reconstructed affected sources that commence construction or reconstruction before the effective date of a relevant standard are not subject to the preconstruction review requirements specified in paragraphs (b)(3), (d), and (e) of this section.

(2) This section includes notification requirements for new affected sources and reconstructed affected sources that are not major-emitting affected sources and that are or become subject to a relevant promulgated emission standard after the effective date of a relevant standard promulgated under this part.

(b) *Requirements for existing, newly constructed, and reconstructed sources.*

(1) A new affected source for which construction commences after proposal of a relevant standard is subject to relevant standards for new affected sources, including compliance dates. An affected source for which reconstruction commences after proposal of a relevant standard is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.

(2) [Reserved]

(3) After the effective date of any relevant standard promulgated by the Administrator under this part, no person may, without obtaining written approval in advance from the Administrator in accordance with the procedures specified in paragraphs (d) and (e) of this section, do any of the following:

(i) Construct a new affected source that is major-emitting and subject to such standard;

(ii) Reconstruct an affected source that is major-emitting and subject to such standard; or

(iii) Reconstruct a major source such that the source becomes an affected source that is major-emitting and subject to the standard.

(4) After the effective date of any relevant standard promulgated by the Administrator under this part, an owner or operator who constructs a new affected source that is not major-emitting or reconstructs an

affected source that is not major-emitting that is subject to such standard, or reconstructs a source such that the source becomes an affected source subject to the standard, must notify the Administrator of the intended construction or reconstruction. The notification must be submitted in accordance with the procedures in § 63.9(b).

(5) [Reserved]

(6) After the effective date of any relevant standard promulgated by the Administrator under this part, equipment added (or a process change) to an affected source that is within the scope of the definition of affected source under the relevant standard must be considered part of the affected source and subject to all provisions of the relevant standard established for that affected source.

(c) [Reserved]

(d) *Application for approval of construction or reconstruction.* The provisions of this paragraph implement section 112(i)(1) of the Act.

(1) *General application requirements.*

(i) An owner or operator who is subject to the requirements of paragraph (b)(3) of this section must submit to the Administrator an application for approval of the construction or reconstruction. The application must be submitted as soon as practicable before actual construction or reconstruction begins. The application for approval of construction or reconstruction may be used to fulfill the initial notification requirements of § 63.9(b)(5). The owner or operator may submit the application for approval well in advance of the date actual construction or reconstruction begins in order to ensure a timely review by the Administrator and that the planned date to begin will not be delayed.

(ii) A separate application shall be submitted for each construction or reconstruction. Each application for approval of construction or reconstruction shall include at a minimum:

(A) The applicant's name and address;

(B) A notification of intention to construct a new major affected source or make any physical or operational change to a major affected source that may meet or has been determined to meet the criteria for a reconstruction, as defined in § 63.2 or in the relevant standard;

(C) The address (i.e., physical location) or proposed address of the source;

(D) An identification of the relevant standard that is the basis of the application;

(E) The expected date of the beginning of actual construction or reconstruction;

(F) The expected completion date of the construction or reconstruction;

(G) [Reserved]

(H) The type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times and in accordance with the test methods specified in the relevant standard, or if actual emissions data are not yet available, an estimate of the type and quantity of hazardous air pollutants expected to be emitted by the source reported in units and averaging times specified in the relevant standard. The owner or operator may submit percent reduction information if a relevant standard is established in terms of percent reduction. However, operating parameters, such as flow rate, shall be included in the submission to the extent that they demonstrate performance and compliance; and

(I) [Reserved]

(J) Other information as specified in paragraphs (d)(2) and (d)(3) of this section.

(iii) An owner or operator who submits estimates or preliminary information in place of the actual emissions data and analysis required in paragraphs (d)(1)(ii)(H) and (d)(2) of this section shall submit the actual, measured emissions data and other correct information as soon as available but no later than with the notification of compliance status required in § 63.9(h) (see § 63.9(h)(5)).

(2) *Application for approval of construction.* Each application for approval of construction must include, in addition to the information required in paragraph (d)(1)(ii) of this section, technical information describing the proposed nature, size, design, operating design capacity, and method of operation of the source, including an identification of each type of emission point for each type of hazardous air pollutant that is emitted (or could reasonably be anticipated to be emitted) and a description of the planned air pollution control system (equipment or method) for each emission point. The description of the equipment to be used for the control of emissions must include each control device for each hazardous air pollutant and the estimated control efficiency (percent) for each control device. The description of the method to be used for the control of emissions must include an estimated control efficiency (percent) for that method. Such technical information must include calculations of emission estimates in sufficient detail to permit assessment of the validity of the calculations.

(3) *Application for approval of reconstruction.* Each application for approval of reconstruction shall include, in addition to the information required in paragraph (d)(1)(ii) of this section -

(i) A brief description of the affected source and the components that are to be replaced;

(ii) A description of present and proposed emission control systems (i.e., equipment or methods). The description of the equipment to be used for the control of emissions shall include each control device for each hazardous air pollutant and the estimated control efficiency (percent) for each control device. The description of the method to be used for the control of emissions shall include an estimated control efficiency (percent) for that method. Such technical information shall include calculations of emission estimates in sufficient detail to permit assessment of the validity of the calculations;

(iii) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new source;

(iv) The estimated life of the affected source after the replacements; and

(v) A discussion of any economic or technical limitations the source may have in complying with relevant standards or other requirements after the proposed replacements. The discussion shall be sufficiently detailed to demonstrate to the Administrator's satisfaction that the technical or economic limitations affect the source's ability to comply with the relevant standard and how they do so.

(vi) If in the application for approval of reconstruction the owner or operator designates the affected source as a reconstructed source and declares that there are no economic or technical limitations to prevent the source from complying with all relevant standards or other requirements, the owner or operator need not submit the information required in paragraphs (d)(3)(iii) through (d)(3)(v) of this section.

(4) *Additional information.* The Administrator may request additional relevant information after the submittal of an application for approval of construction or reconstruction.

(e) *Approval of construction or reconstruction.*

(1) (i) If the Administrator determines that, if properly constructed, or reconstructed, and operated, a new or existing source for which an application under paragraph (d) of this section was submitted will not cause

emissions in violation of the relevant standard(s) and any other federally enforceable requirements, the Administrator will approve the construction or reconstruction.

(ii) In addition, in the case of reconstruction, the Administrator's determination under this paragraph will be based on:

(A) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new source;

(B) The estimated life of the source after the replacements compared to the life of a comparable entirely new source;

(C) The extent to which the components being replaced cause or contribute to the emissions from the source; and

(D) Any economic or technical limitations on compliance with relevant standards that are inherent in the proposed replacements.

(2) (i) The Administrator will notify the owner or operator in writing of approval or intention to deny approval of construction or reconstruction within 60 calendar days after receipt of sufficient information to evaluate an application submitted under paragraph (d) of this section. The 60-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete. The Administrator will notify the owner or operator in writing of the status of his/her application, that is, whether the application contains sufficient information to make a determination, within 30 calendar days after receipt of the original application and within 30 calendar days after receipt of any supplementary information that is submitted.

(ii) When notifying the owner or operator that his/her application is not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 30 calendar days after he/she is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.

(3) Before denying any application for approval of construction or reconstruction, the Administrator will notify the applicant of the Administrator's intention to issue the denial together with -

(i) Notice of the information and findings on which the intended denial is based; and

(ii) Notice of opportunity for the applicant to present, in writing, within 30 calendar days after he/she is notified of the intended denial, additional information or arguments to the Administrator to enable further action on the application.

(4) A final determination to deny any application for approval will be in writing and will specify the grounds on which the denial is based. The final determination will be made within 60 calendar days of presentation of additional information or arguments (if the application is complete), or within 60 calendar days after the final date specified for presentation if no presentation is made.

(5) Neither the submission of an application for approval nor the Administrator's approval of construction or reconstruction shall -

(i) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or with any other applicable Federal, State, or local requirement; or

(ii) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

(f) *Approval of construction or reconstruction based on prior State preconstruction review.*

(1) Preconstruction review procedures that a State utilizes for other purposes may also be utilized for purposes of this section if the procedures are substantially equivalent to those specified in this section. The Administrator will approve an application for construction or reconstruction specified in paragraphs (b)(3) and (d) of this section if the owner or operator of a new affected source or reconstructed affected source, who is subject to such requirement meets the following conditions:

(i) The owner or operator of the new affected source or reconstructed affected source has undergone a preconstruction review and approval process in the State in which the source is (or would be) located and has received a federally enforceable construction permit that contains a finding that the source will meet the relevant promulgated emission standard, if the source is properly built and operated.

(ii) Provide a statement from the State or other evidence (such as State regulations) that it considered the factors specified in paragraph (e)(1) of this section.

(2) The owner or operator must submit to the Administrator the request for approval of construction or reconstruction under this paragraph (f)(2) no later than the application deadline specified in paragraph (d)(1) of this section (see also § 63.9(b)(2)). The owner or operator must include in the request information sufficient for the Administrator's determination. The Administrator will evaluate the owner or operator's request in accordance with the procedures specified in paragraph (e) of this section. The Administrator may request additional relevant information after the submittal of a request for approval of construction or reconstruction under this paragraph (f)(2).

§ 63.6 Compliance with standards and maintenance requirements.

(a) *Applicability.*

(1) The requirements in this section apply to the owner or operator of affected sources for which any relevant standard has been established pursuant to section 112 of the Act and the applicability of such requirements is set out in accordance with § 63.1(a)(4) unless -

(i) The Administrator (or a State with an approved permit program) has granted an extension of compliance consistent with paragraph (i) of this section; or

(ii) The President has granted an exemption from compliance with any relevant standard in accordance with section 112(i)(4) of the Act.

(2) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source, such source shall be subject to the relevant emission standard or other requirement.

(b) *Compliance dates for new and reconstructed sources.*

(1) Except as specified in paragraphs (b)(3) and (4) of this section, the owner or operator of a new or reconstructed affected source for which construction or reconstruction commences after proposal of a relevant standard that has an initial startup before the effective date of a relevant standard established under this part pursuant to section 112(d), (f), or (h) of the Act must comply with such standard not later than the standard's effective date.

(2) Except as specified in paragraphs (b)(3) and (4) of this section, the owner or operator of a new or reconstructed affected source that has an initial startup after the effective date of a relevant standard established under this part pursuant to section 112(d), (f), or (h) of the Act must comply with such standard upon startup of the source.

(3) The owner or operator of an affected source for which construction or reconstruction is commenced after the proposal date of a relevant standard established under this part pursuant to section 112(d), 112(f), or 112(h) of the Act but before the effective date (that is, promulgation) of such standard shall comply with the relevant emission standard not later than the date 3 years after the effective date if:

(i) The promulgated standard (that is, the relevant standard) is more stringent than the proposed standard; for purposes of this paragraph, a finding that controls or compliance methods are "more stringent" must include control technologies or performance criteria and compliance or compliance assurance methods that are different but are substantially equivalent to those required by the promulgated rule, as determined by the Administrator (or his or her authorized representative); and

(ii) The owner or operator complies with the standard as proposed during the 3-year period immediately after the effective date.

(4) The owner or operator of an affected source for which construction or reconstruction is commenced after the proposal date of a relevant standard established pursuant to section 112(d) of the Act but before the proposal date of a relevant standard established pursuant to section 112(f) shall not be required to comply with the section 112(f) emission standard until the date 10 years after the date construction or reconstruction is commenced, except that, if the section 112(f) standard is promulgated more than 10 years after construction or reconstruction is commenced, the owner or operator must comply with the standard as provided in paragraphs (b)(1) and (2) of this section.

(5) The owner or operator of a new source that is subject to the compliance requirements of paragraph (b)(3) or (4) of this section must notify the Administrator in accordance with § 63.9(d)

(6) [Reserved]

(7) When an area source increases its emissions of (or its potential to emit) hazardous air pollutants such that the source becomes a major source, the portion of the facility that meets the definition of a new affected source must comply with all requirements of that standard applicable to new sources. The source owner or operator must comply with the relevant standard upon startup.

(c) *Compliance dates for existing sources.*

(1) After the effective date of a relevant standard established under this part pursuant to section 112(d) or 112(h) of the Act, the owner or operator of an existing source shall comply with such standard by the compliance date established by the Administrator in the applicable subpart(s) of this part, except as provided in § 63.1(c)(6)(i). Except as otherwise provided for in section 112 of the Act, in no case will the compliance date established for an existing source in an applicable subpart of this part exceed 3 years after the effective date of such standard.

(2) If an existing source is subject to a standard established under this part pursuant to section 112(f) of the Act, the owner or operator must comply with the standard by the date 90 days after the standard's effective date, or by the date specified in an extension granted to the source by the Administrator under paragraph (i)(4)(ii) of this section, whichever is later.

(3)-(4) [Reserved]

(5) Except as provided in paragraph (b)(7) of this section, the owner or operator of an area source that increases its emissions of (or its potential to emit) hazardous air pollutants such that the source becomes a major source and meets the definition of an existing source in the applicable major source standard shall be subject to relevant standards for existing sources. Except as provided in paragraph § 63.1(c)(6)(i)(B), such sources must comply by the date specified in the standards for existing area sources that become major sources. If no such compliance date is specified in the standards, the source shall have a period of time to

comply with the relevant emission standard that is equivalent to the compliance period specified in the relevant standard for existing sources in existence at the time the standard becomes effective.

(d) [Reserved]

(e) *Operation and maintenance requirements.*

(1) (i) At all times, including periods of startup, shutdown, and malfunction, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in paragraph (e)(3) of this section), review of operation and maintenance records, and inspection of the source.

(ii) Malfunctions must be corrected as soon as practicable after their occurrence. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, an owner or operator must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.

(iii) Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.

(2) [Reserved]

(3) *Startup, shutdown, and malfunction plan.*

(i) The owner or operator of an affected source must develop a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction; and a program of corrective action for malfunctioning process, air pollution control, and monitoring equipment used to comply with the relevant standard. The startup, shutdown, and malfunction plan does not need to address any scenario that would not cause the source to exceed an applicable emission limitation in the relevant standard. This plan must be developed by the owner or operator by the source's compliance date for that relevant standard. The purpose of the startup, shutdown, and malfunction plan is to -

(A) Ensure that, at all times, the owner or operator operates and maintains each affected source, including associated air pollution control and monitoring equipment, in a manner which satisfies the general duty to minimize emissions established by paragraph (e)(1)(i) of this section;

(B) Ensure that owners or operators are prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants; and

(C) Reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).

(ii) [Reserved]

(iii) When actions taken by the owner or operator during a startup or shutdown (and the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the owner or operator must keep records for that event which demonstrate that the procedures specified in the plan were followed. These records may take the form of a "checklist," or other effective form of recordkeeping that confirms conformance with the startup, shutdown, and malfunction plan and describes the actions taken for that event. In addition, the owner or operator must keep records of these events as specified in paragraph 63.10(b), including records of the occurrence and duration of each startup or shutdown (if the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), or malfunction of operation and each malfunction of the air pollution control and monitoring equipment. Furthermore, the owner or operator shall confirm that actions taken during the relevant reporting period during periods of startup, shutdown, and malfunction were consistent with the affected source's startup, shutdown and malfunction plan in the semiannual (or more frequent) startup, shutdown, and malfunction report required in § 63.10(d)(5).

(iv) If an action taken by the owner or operator during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard, then the owner or operator must record the actions taken for that event and must report such actions within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event, in accordance with § 63.10(d)(5) (unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator).

(v) The owner or operator must maintain at the affected source a current startup, shutdown, and malfunction plan and must make the plan available upon request for inspection and copying by the Administrator. In addition, if the startup, shutdown, and malfunction plan is subsequently revised as provided in paragraph (e)(3)(viii) of this section, the owner or operator must maintain at the affected source each previous (i.e., superseded) version of the startup, shutdown, and malfunction plan, and must make each such previous version available for inspection and copying by the Administrator for a period of 5 years after revision of the plan. If at any time after adoption of a startup, shutdown, and malfunction plan the affected source ceases operation or is otherwise no longer subject to the provisions of this part, the owner or operator must retain a copy of the most recent plan for 5 years from the date the source ceases operation or is no longer subject to this part and must make the plan available upon request for inspection and copying by the Administrator. The Administrator may at any time request in writing that the owner or operator submit a copy of any startup, shutdown, and malfunction plan (or a portion thereof) which is maintained at the affected source or in the possession of the owner or operator. Upon receipt of such a request, the owner or operator must promptly submit a copy of the requested plan (or a portion thereof) to the Administrator. The owner or operator may elect to submit the required copy of any startup, shutdown, and malfunction plan to the Administrator in an electronic format. If the owner or operator claims that any portion of such a startup, shutdown, and malfunction plan is confidential business information entitled to protection from disclosure under section 114(c) of the Act or 40

CFR 2.301, the material which is claimed as confidential must be clearly designated in the submission.

(vi) To satisfy the requirements of this section to develop a startup, shutdown, and malfunction plan, the owner or operator may use the affected source's standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided the alternative plans meet all the requirements of this section and are made available for inspection or submitted when requested by the Administrator.

(vii) Based on the results of a determination made under paragraph (e)(1)(i) of this section, the Administrator may require that an owner or operator of an affected source make changes to the startup, shutdown, and malfunction plan for that source. The Administrator must require appropriate revisions to a startup, shutdown, and malfunction plan, if the Administrator finds that the plan:

(A) Does not address a startup, shutdown, or malfunction event that has occurred;

(B) Fails to provide for the operation of the source (including associated air pollution control and monitoring equipment) during a startup, shutdown, or malfunction event in a manner consistent with the general duty to minimize emissions established by paragraph (e)(1)(i) of this section;

(C) Does not provide adequate procedures for correcting malfunctioning process and/or air pollution control and monitoring equipment as quickly as practicable; or

(D) Includes an event that does not meet the definition of startup, shutdown, or malfunction listed in § 63.2.

(viii) The owner or operator may periodically revise the startup, shutdown, and malfunction plan for the affected source as necessary to satisfy the requirements of this part or to reflect changes in equipment or procedures at the affected source. Unless the permitting authority provides otherwise, the owner or operator may make such revisions to the startup, shutdown, and malfunction plan without prior approval by the Administrator or the permitting authority. However, each such revision to a startup, shutdown, and malfunction plan must be reported in the semiannual report required by § 63.10(d)(5). If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time the owner or operator developed the plan, the owner or operator must revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment. In the event that the owner or operator makes any revision to the startup, shutdown, and malfunction plan which alters the scope of the activities at the source which are deemed to be a startup, shutdown, or malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard established under this part, the revised plan shall not take effect until after the owner or operator has provided a written notice describing the revision to the permitting authority.

(ix) The title V permit for an affected source must require that the owner or operator develop a startup, shutdown, and malfunction plan which conforms to the provisions of this part, but may do so by citing to the relevant subpart or subparagraphs of paragraph (e) of this section. However, any revisions made to the startup, shutdown, and malfunction plan in accordance with the procedures established by this part shall not be deemed to constitute permit revisions under part 70 or part 71 of this chapter and the elements of the startup, shutdown, and malfunction plan shall not be

considered an applicable requirement as defined in § 70.2 and § 71.2 of this chapter. Moreover, none of the procedures specified by the startup, shutdown, and malfunction plan for an affected source shall be deemed to fall within the permit shield provision in section 504(f) of the Act.

(f) *Compliance with nonopacity emission standards* -

(1) *Applicability.* The non-opacity emission standards set forth in this part shall apply at all times except as otherwise specified in an applicable subpart. If a startup, shutdown, or malfunction of one portion of an affected source does not affect the ability of particular emission points within other portions of the affected source to comply with the non-opacity emission standards set forth in this part, then that emission point must still be required to comply with the non-opacity emission standards and other applicable requirements.

(2) *Methods for determining compliance.*

(i) The Administrator will determine compliance with nonopacity emission standards in this part based on the results of performance tests conducted according to the procedures in § 63.7, unless otherwise specified in an applicable subpart of this part.

(ii) The Administrator will determine compliance with nonopacity emission standards in this part by evaluation of an owner or operator's conformance with operation and maintenance requirements, including the evaluation of monitoring data, as specified in § 63.6(e) and applicable subparts of this part.

(iii) If an affected source conducts performance testing at startup to obtain an operating permit in the State in which the source is located, the results of such testing may be used to demonstrate compliance with a relevant standard if -

(A) The performance test was conducted within a reasonable amount of time before an initial performance test is required to be conducted under the relevant standard;

(B) The performance test was conducted under representative operating conditions for the source;

(C) The performance test was conducted and the resulting data were reduced using EPA-approved test methods and procedures, as specified in § 63.7(e) of this subpart; and

(D) The performance test was appropriately quality-assured, as specified in § 63.7(c).

(iv) The Administrator will determine compliance with design, equipment, work practice, or operational emission standards in this part by review of records, inspection of the source, and other procedures specified in applicable subparts of this part.

(v) The Administrator will determine compliance with design, equipment, work practice, or operational emission standards in this part by evaluation of an owner or operator's conformance with operation and maintenance requirements, as specified in paragraph (e) of this section and applicable subparts of this part.

(3) *Finding of compliance.* The Administrator will make a finding concerning an affected source's compliance with a non-opacity emission standard, as specified in paragraphs (f)(1) and (2) of this section, upon obtaining all the compliance information required by the relevant standard (including the written reports of performance test results, monitoring results, and other information, if applicable), and information available to the Administrator pursuant to paragraph (e)(1)(i) of this section.

(g) *Use of an alternative nonopacity emission standard.*

(1) If, in the Administrator's judgment, an owner or operator of an affected source has established that an alternative means of emission limitation will achieve a reduction in emissions of a hazardous air pollutant from an affected source at least equivalent to the reduction in emissions of that pollutant from that source achieved under any design, equipment, work practice, or operational emission standard, or combination thereof, established under this part pursuant to section 112(h) of the Act, the Administrator will publish in the Federal Register a notice permitting the use of the alternative emission standard for purposes of compliance with the promulgated standard. Any Federal Register notice under this paragraph shall be published only after the public is notified and given the opportunity to comment. Such notice will restrict the permission to the stationary source(s) or category(ies) of sources from which the alternative emission standard will achieve equivalent emission reductions. The Administrator will condition permission in such notice on requirements to assure the proper operation and maintenance of equipment and practices required for compliance with the alternative emission standard and other requirements, including appropriate quality assurance and quality control requirements, that are deemed necessary.

(2) An owner or operator requesting permission under this paragraph shall, unless otherwise specified in an applicable subpart, submit a proposed test plan or the results of testing and monitoring in accordance with § 63.7 and § 63.8, a description of the procedures followed in testing or monitoring, and a description of pertinent conditions during testing or monitoring. Any testing or monitoring conducted to request permission to use an alternative nonopacity emission standard shall be appropriately quality assured and quality controlled, as specified in § 63.7 and § 63.8.

(3) The Administrator may establish general procedures in an applicable subpart that accomplish the requirements of paragraphs (g)(1) and (g)(2) of this section.

(h) *Compliance with opacity and visible emission standards* -

(1) *Applicability.* The opacity and visible emission standards set forth in this part must apply at all times except as otherwise specified in an applicable subpart. If a startup, shutdown, or malfunction of one portion of an affected source does not affect the ability of particular emission points within other portions of the affected source to comply with the opacity and visible emission standards set forth in this part, then that emission point shall still be required to comply with the opacity and visible emission standards and other applicable requirements.

(2) *Methods for determining compliance.*

(i) The Administrator will determine compliance with opacity and visible emission standards in this part based on the results of the test method specified in an applicable subpart. Whenever a continuous opacity monitoring system (COMS) is required to be installed to determine compliance with numerical opacity emission standards in this part, compliance with opacity emission standards in this part shall be determined by using the results from the COMS. Whenever an opacity emission test method is not specified, compliance with opacity emission standards in this part shall be determined by conducting observations in accordance with Test Method 9 in appendix A of part 60 of this chapter or the method specified in paragraph (h)(7)(ii) of this section. Whenever a visible emission test method is not specified, compliance with visible emission standards in this part shall be determined by conducting observations in accordance with Test Method 22 in appendix A of part 60 of this chapter.

(ii) [Reserved]

(iii) If an affected source undergoes opacity or visible emission testing at startup to obtain an operating permit in the State in which the source is located, the results of such testing may be used to demonstrate compliance with a relevant standard if -

(A) The opacity or visible emission test was conducted within a reasonable amount of time before a performance test is required to be conducted under the relevant standard;

(B) The opacity or visible emission test was conducted under representative operating conditions for the source;

(C) The opacity or visible emission test was conducted and the resulting data were reduced using EPA-approved test methods and procedures, as specified in § 63.7(e); and

(D) The opacity or visible emission test was appropriately quality-assured, as specified in § 63.7(c) of this section.

(3) [Reserved]

(4) *Notification of opacity or visible emission observations.* The owner or operator of an affected source shall notify the Administrator in writing of the anticipated date for conducting opacity or visible emission observations in accordance with § 63.9(f), if such observations are required for the source by a relevant standard.

(5) *Conduct of opacity or visible emission observations.* When a relevant standard under this part includes an opacity or visible emission standard, the owner or operator of an affected source shall comply with the following:

(i) For the purpose of demonstrating initial compliance, opacity or visible emission observations shall be conducted concurrently with the initial performance test required in § 63.7 unless one of the following conditions applies:

(A) If no performance test under § 63.7 is required, opacity or visible emission observations shall be conducted within 60 days after achieving the maximum production rate at which a new or reconstructed source will be operated, but not later than 120 days after initial startup of the source, or within 120 days after the effective date of the relevant standard in the case of new sources that start up before the standard's effective date. If no performance test under § 63.7 is required, opacity or visible emission observations shall be conducted within 120 days after the compliance date for an existing or modified source; or

(B) If visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the initial performance test required under § 63.7, or within the time period specified in paragraph (h)(5)(i)(A) of this section, the source's owner or operator shall reschedule the opacity or visible emission observations as soon after the initial performance test, or time period, as possible, but not later than 30 days thereafter, and shall advise the Administrator of the rescheduled date. The rescheduled opacity or visible emission observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial performance test conducted under § 63.7. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity or visible emission observations from being made concurrently with the initial performance test in accordance with procedures contained in Test Method 9 or Test Method 22 in appendix A of part 60 of this chapter.

(ii) For the purpose of demonstrating initial compliance, the minimum total time of opacity observations shall be 3 hours (30 6-minute averages) for the performance test or other required set of observations (e.g., for fugitive-type emission sources subject only to an opacity emission standard).

(iii) The owner or operator of an affected source to which an opacity or visible emission standard in this part applies shall conduct opacity or visible emission observations in accordance with the

provisions of this section, record the results of the evaluation of emissions, and report to the Administrator the opacity or visible emission results in accordance with the provisions of § 63.10(d).

(iv) [Reserved]

(v) Opacity readings of portions of plumes that contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity emission standards.

(6) *Availability of records.* The owner or operator of an affected source shall make available, upon request by the Administrator, such records that the Administrator deems necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification.

(7) *Use of a continuous opacity monitoring system.*

(i) The owner or operator of an affected source required to use a continuous opacity monitoring system (COMS) shall record the monitoring data produced during a performance test required under § 63.7 and shall furnish the Administrator a written report of the monitoring results in accordance with the provisions of § 63.10(e)(4).

(ii) Whenever an opacity emission test method has not been specified in an applicable subpart, or an owner or operator of an affected source is required to conduct Test Method 9 observations (see appendix A of part 60 of this chapter), the owner or operator may submit, for compliance purposes, COMS data results produced during any performance test required under § 63.7 in lieu of Method 9 data. If the owner or operator elects to submit COMS data for compliance with the opacity emission standard, he or she shall notify the Administrator of that decision, in writing, simultaneously with the notification under § 63.7(b) of the date the performance test is scheduled to begin. Once the owner or operator of an affected source has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent performance tests required under § 63.7, unless the owner or operator notifies the Administrator in writing to the contrary not later than with the notification under § 63.7(b) of the date the subsequent performance test is scheduled to begin.

(iii) For the purposes of determining compliance with the opacity emission standard during a performance test required under § 63.7 using COMS data, the COMS data shall be reduced to 6-minute averages over the duration of the mass emission performance test.

(iv) The owner or operator of an affected source using a COMS for compliance purposes is responsible for demonstrating that he/she has complied with the performance evaluation requirements of § 63.8(e), that the COMS has been properly maintained, operated, and data quality-assured, as specified in § 63.8(c) and § 63.8(d), and that the resulting data have not been altered in any way.

(v) Except as provided in paragraph (h)(7)(ii) of this section, the results of continuous monitoring by a COMS that indicate that the opacity at the time visual observations were made was not in excess of the emission standard are probative but not conclusive evidence of the actual opacity of an emission, provided that the affected source proves that, at the time of the alleged violation, the instrument used was properly maintained, as specified in § 63.8(c), and met Performance Specification 1 in appendix B of part 60 of this chapter, and that the resulting data have not been altered in any way.

(8) *Finding of compliance.* The Administrator will make a finding concerning an affected source's compliance with an opacity or visible emission standard upon obtaining all the compliance information required by the relevant standard (including the written reports of the results of the performance tests required by § 63.7, the results of Test Method 9 or another required opacity or visible emission test method, the observer

certification required by paragraph (h)(6) of this section, and the continuous opacity monitoring system results, whichever is/are applicable) and any information available to the Administrator needed to determine whether proper operation and maintenance practices are being used.

(9) *Adjustment to an opacity emission standard.*

(i) If the Administrator finds under paragraph (h)(8) of this section that an affected source is in compliance with all relevant standards for which initial performance tests were conducted under § 63.7, but during the time such performance tests were conducted fails to meet any relevant opacity emission standard, the owner or operator of such source may petition the Administrator to make appropriate adjustment to the opacity emission standard for the affected source. Until the Administrator notifies the owner or operator of the appropriate adjustment, the relevant opacity emission standard remains applicable.

(ii) The Administrator may grant such a petition upon a demonstration by the owner or operator that -

(A) The affected source and its associated air pollution control equipment were operated and maintained in a manner to minimize the opacity of emissions during the performance tests;

(B) The performance tests were performed under the conditions established by the Administrator; and

(C) The affected source and its associated air pollution control equipment were incapable of being adjusted or operated to meet the relevant opacity emission standard.

(iii) The Administrator will establish an adjusted opacity emission standard for the affected source meeting the above requirements at a level at which the source will be able, as indicated by the performance and opacity tests, to meet the opacity emission standard at all times during which the source is meeting the mass or concentration emission standard. The Administrator will promulgate the new opacity emission standard in the Federal Register.

(iv) After the Administrator promulgates an adjusted opacity emission standard for an affected source, the owner or operator of such source shall be subject to the new opacity emission standard, and the new opacity emission standard shall apply to such source during any subsequent performance tests.

(i) *Extension of compliance with emission standards.*

(1) Until an extension of compliance has been granted by the Administrator (or a State with an approved permit program) under this paragraph, the owner or operator of an affected source subject to the requirements of this section shall comply with all applicable requirements of this part.

(2) *Extension of compliance for early reductions and other reductions* -

(i) *Early reductions.* Pursuant to section 112(i)(5) of the Act, if the owner or operator of an existing source demonstrates that the source has achieved a reduction in emissions of hazardous air pollutants in accordance with the provisions of subpart D of this part, the Administrator (or the State with an approved permit program) will grant the owner or operator an extension of compliance with specific requirements of this part, as specified in subpart D.

(ii) *Other reductions.* Pursuant to section 112(i)(6) of the Act, if the owner or operator of an existing source has installed best available control technology (BACT) (as defined in section 169(3) of the Act) or technology required to meet a lowest achievable emission rate (LAER) (as defined in section 171 of the Act) prior to the promulgation of an emission standard in this part applicable to such source

and the same pollutant (or stream of pollutants) controlled pursuant to the BACT or LAER installation, the Administrator will grant the owner or operator an extension of compliance with such emission standard that will apply until the date 5 years after the date on which such installation was achieved, as determined by the Administrator.

(3) *Request for extension of compliance.* Paragraphs (i)(4) through (i)(7) of this section concern requests for an extension of compliance with a relevant standard under this part (except requests for an extension of compliance under paragraph (i)(2)(i) of this section will be handled through procedures specified in subpart D of this part).

(4) (i) (A) The owner or operator of an existing source who is unable to comply with a relevant standard established under this part pursuant to section 112(d) of the Act may request that the Administrator (or a State, when the State has an approved part 70 permit program and the source is required to obtain a part 70 permit under that program, or a State, when the State has been delegated the authority to implement and enforce the emission standard for that source) grant an extension allowing the source up to 1 additional year to comply with the standard, if such additional period is necessary for the installation of controls. An additional extension of up to 3 years may be added for mining waste operations, if the 1-year extension of compliance is insufficient to dry and cover mining waste in order to reduce emissions of any hazardous air pollutant. The owner or operator of an affected source who has requested an extension of compliance under this paragraph and who is otherwise required to obtain a title V permit shall apply for such permit or apply to have the source's title V permit revised to incorporate the conditions of the extension of compliance. The conditions of an extension of compliance granted under this paragraph will be incorporated into the affected source's title V permit according to the provisions of part 70 or Federal title V regulations in this chapter (42 U.S.C. 7661), whichever are applicable.

(B) Any request under this paragraph for an extension of compliance with a relevant standard must be submitted in writing to the appropriate authority no later than 120 days prior to the affected source's compliance date (as specified in paragraphs (b) and (c) of this section), except as provided for in paragraph (i)(4)(i)(C) of this section. Nonfrivolous requests submitted under this paragraph will stay the applicability of the rule as to the emission points in question until such time as the request is granted or denied. A denial will be effective as of the date of denial. Emission standards established under this part may specify alternative dates for the submittal of requests for an extension of compliance if alternatives are appropriate for the source categories affected by those standards.

(C) An owner or operator may submit a compliance extension request after the date specified in paragraph (i)(4)(i)(B) of this section provided the need for the compliance extension arose after that date, and before the otherwise applicable compliance date and the need arose due to circumstances beyond reasonable control of the owner or operator. This request must include, in addition to the information required in paragraph (i)(6)(i) of this section, a statement of the reasons additional time is needed and the date when the owner or operator first learned of the problems. Nonfrivolous requests submitted under this paragraph will stay the applicability of the rule as to the emission points in question until such time as the request is granted or denied. A denial will be effective as of the original compliance date.

(ii) The owner or operator of an existing source unable to comply with a relevant standard established under this part pursuant to section 112(f) of the Act may request that the Administrator grant an extension allowing the source up to 2 years after the standard's effective date to comply with the standard. The Administrator may grant such an extension if he/she finds that such additional period is necessary for the installation of controls and that steps will be taken during the period of the extension to assure that the health of persons will be protected from imminent

endangerment. Any request for an extension of compliance with a relevant standard under this paragraph must be submitted in writing to the Administrator not later than 90 calendar days after the effective date of the relevant standard.

(5) The owner or operator of an existing source that has installed BACT or technology required to meet LAER [as specified in paragraph (i)(2)(ii) of this section] prior to the promulgation of a relevant emission standard in this part may request that the Administrator grant an extension allowing the source 5 years from the date on which such installation was achieved, as determined by the Administrator, to comply with the standard. Any request for an extension of compliance with a relevant standard under this paragraph shall be submitted in writing to the Administrator not later than 120 days after the promulgation date of the standard. The Administrator may grant such an extension if he or she finds that the installation of BACT or technology to meet LAER controls the same pollutant (or stream of pollutants) that would be controlled at that source by the relevant emission standard.

(6) (i) The request for a compliance extension under paragraph (i)(4) of this section shall include the following information:

(A) A description of the controls to be installed to comply with the standard;

(B) A compliance schedule, including the date by which each step toward compliance will be reached. At a minimum, the list of dates shall include:

(*1*) The date by which on-site construction, installation of emission control equipment, or a process change is planned to be initiated; and

(*2*) The date by which final compliance is to be achieved.

(*3*) The date by which on-site construction, installation of emission control equipment, or a process change is to be completed; and

(*4*) The date by which final compliance is to be achieved;

(C)-(D)

(ii) The request for a compliance extension under paragraph (i)(5) of this section shall include all information needed to demonstrate to the Administrator's satisfaction that the installation of BACT or technology to meet LAER controls the same pollutant (or stream of pollutants) that would be controlled at that source by the relevant emission standard.

(7) Advice on requesting an extension of compliance may be obtained from the Administrator (or the State with an approved permit program).

(8) *Approval of request for extension of compliance.* Paragraphs (i)(9) through (i)(14) of this section concern approval of an extension of compliance requested under paragraphs (i)(4) through (i)(6) of this section.

(9) Based on the information provided in any request made under paragraphs (i)(4) through (i)(6) of this section, or other information, the Administrator (or the State with an approved permit program) may grant an extension of compliance with an emission standard, as specified in paragraphs (i)(4) and (i)(5) of this section.

(10) The extension will be in writing and will -

(i) Identify each affected source covered by the extension;

(ii) Specify the termination date of the extension;

(iii) Specify the dates by which steps toward compliance are to be taken, if appropriate;

(iv) Specify other applicable requirements to which the compliance extension applies (e.g., performance tests); and

(v) (A) Under paragraph (i)(4), specify any additional conditions that the Administrator (or the State) deems necessary to assure installation of the necessary controls and protection of the health of persons during the extension period; or

(B) Under paragraph (i)(5), specify any additional conditions that the Administrator deems necessary to assure the proper operation and maintenance of the installed controls during the extension period.

(11) The owner or operator of an existing source that has been granted an extension of compliance under paragraph (i)(10) of this section may be required to submit to the Administrator (or the State with an approved permit program) progress reports indicating whether the steps toward compliance outlined in the compliance schedule have been reached. The contents of the progress reports and the dates by which they shall be submitted will be specified in the written extension of compliance granted under paragraph (i)(10) of this section.

(12) (i) The Administrator (or the State with an approved permit program) will notify the owner or operator in writing of approval or intention to deny approval of a request for an extension of compliance within 30 calendar days after receipt of sufficient information to evaluate a request submitted under paragraph (i)(4)(i) or (i)(5) of this section. The Administrator (or the State) will notify the owner or operator in writing of the status of his/her application, that is, whether the application contains sufficient information to make a determination, within 30 calendar days after receipt of the original application and within 30 calendar days after receipt of any supplementary information that is submitted. The 30-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete.

(ii) When notifying the owner or operator that his/her application is not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 30 calendar days after he/she is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.

(iii) Before denying any request for an extension of compliance, the Administrator (or the State with an approved permit program) will notify the owner or operator in writing of the Administrator's (or the State's) intention to issue the denial, together with -

(A) Notice of the information and findings on which the intended denial is based; and

(B) Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after he/she is notified of the intended denial, additional information or arguments to the Administrator (or the State) before further action on the request.

(iv) The Administrator's final determination to deny any request for an extension will be in writing and will set forth the specific grounds on which the denial is based. The final determination will be made within 30 calendar days after presentation of additional information or argument (if the application is complete), or within 30 calendar days after the final date specified for the presentation if no presentation is made.

(13) (i) The Administrator will notify the owner or operator in writing of approval or intention to deny approval of a request for an extension of compliance within 30 calendar days after receipt of sufficient information to evaluate a request submitted under paragraph (i)(4)(ii) of this section. The 30-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete. The Administrator (or the State) will notify the owner or operator in writing of the status of his/her application, that is, whether the application contains sufficient information to make a determination,

within 15 calendar days after receipt of the original application and within 15 calendar days after receipt of any supplementary information that is submitted.

(ii) When notifying the owner or operator that his/her application is not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 15 calendar days after he/she is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.

(iii) Before denying any request for an extension of compliance, the Administrator will notify the owner or operator in writing of the Administrator's intention to issue the denial, together with -

(A) Notice of the information and findings on which the intended denial is based; and

(B) Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after he/she is notified of the intended denial, additional information or arguments to the Administrator before further action on the request.

(iv) A final determination to deny any request for an extension will be in writing and will set forth the specific grounds on which the denial is based. The final determination will be made within 30 calendar days after presentation of additional information or argument (if the application is complete), or within 30 calendar days after the final date specified for the presentation if no presentation is made.

(14) The Administrator (or the State with an approved permit program) may terminate an extension of compliance at an earlier date than specified if any specification under paragraph (i)(10)(iii) or (iv) of this section is not met. Upon a determination to terminate, the Administrator will notify, in writing, the owner or operator of the Administrator's determination to terminate, together with:

(i) Notice of the reason for termination; and

(ii) Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after he/she is notified of the determination to terminate, additional information or arguments to the Administrator before further action on the termination.

(iii) A final determination to terminate an extension of compliance will be in writing and will set forth the specific grounds on which the termination is based. The final determination will be made within 30 calendar days after presentation of additional information or arguments, or within 30 calendar days after the final date specified for the presentation if no presentation is made.

(15) [Reserved]

(16) The granting of an extension under this section shall not abrogate the Administrator's authority under section 114 of the Act.

(j) *Exemption from compliance with emission standards.* The President may exempt any stationary source from compliance with any relevant standard established pursuant to section 112 of the Act for a period of not more than 2 years if the President determines that the technology to implement such standard is not available and that it is in the national security interests of the United States to do so. An exemption under this paragraph may be extended for 1 or more additional periods, each period not to exceed 2 years.

§ 63.7 Performance testing requirements.

(a) *Applicability and performance test dates.*

(1) The applicability of this section is set out in § 63.1(a)(4).

(2) Except as provided in paragraph (a)(4) of this section, if required to do performance testing by a relevant standard, and unless a waiver of performance testing is obtained under this section or the conditions of paragraph (c)(3)(ii)(B) of this section apply, the owner or operator of the affected source must perform such tests within 180 days of the compliance date for such source.

(i)-(viii) [Reserved]

(ix) Except as provided in paragraph (a)(4) of this section, when an emission standard promulgated under this part is more stringent than the standard proposed (see § 63.6(b)(3)), the owner or operator of a new or reconstructed source subject to that standard for which construction or reconstruction is commenced between the proposal and promulgation dates of the standard shall comply with performance testing requirements within 180 days after the standard's effective date, or within 180 days after startup of the source, whichever is later. If the promulgated standard is more stringent than the proposed standard, the owner or operator may choose to demonstrate compliance with either the proposed or the promulgated standard. If the owner or operator chooses to comply with the proposed standard initially, the owner or operator shall conduct a second performance test within 3 years and 180 days after the effective date of the standard, or after startup of the source, whichever is later, to demonstrate compliance with the promulgated standard.

(3) The Administrator may require an owner or operator to conduct performance tests at the affected source at any other time when the action is authorized by section 114 of the Act.

(4) If a force majeure is about to occur, occurs, or has occurred for which the affected owner or operator intends to assert a claim of force majeure:

(i) The owner or operator shall notify the Administrator, in writing as soon as practicable following the date the owner or operator first knew, or through due diligence should have known that the event may cause or caused a delay in testing beyond the regulatory deadline specified in paragraph (a)(2) or (a)(3) of this section, or elsewhere in this part, but the notification must occur before the performance test deadline unless the initial force majeure or a subsequent force majeure event delays the notice, and in such cases, the notification shall occur as soon as practicable.

(ii) The owner or operator shall provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in testing beyond the regulatory deadline to the force majeure; describe the measures taken or to be taken to minimize the delay; and identify a date by which the owner or operator proposes to conduct the performance test. The performance test shall be conducted as soon as practicable after the force majeure occurs.

(iii) The decision as to whether or not to grant an extension to the performance test deadline is solely within the discretion of the Administrator. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an extension as soon as practicable.

(iv) Until an extension of the performance test deadline has been approved by the Administrator under paragraphs (a)(4)(i), (a)(4)(ii), and (a)(4)(iii) of this section, the owner or operator of the affected facility remains strictly subject to the requirements of this part.

(b) *Notification of performance test.*

(1) The owner or operator of an affected source must notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is initially scheduled to begin to allow the Administrator, upon request, to review and approve the site-specific test plan required under paragraph (c) of this section and to have an observer present during the test.

(2) In the event the owner or operator is unable to conduct the performance test on the date specified in the notification requirement specified in paragraph (b)(1) of this section due to unforeseeable circumstances beyond his or her control, the owner or operator must notify the Administrator as soon as practicable and without delay prior to the scheduled performance test date and specify the date when the performance test is rescheduled. This notification of delay in conducting the performance test shall not relieve the owner or operator of legal responsibility for compliance with any other applicable provisions of this part or with any other applicable Federal, State, or local requirement, nor will it prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

(c) *Quality assurance program.*

(1) The results of the quality assurance program required in this paragraph will be considered by the Administrator when he/she determines the validity of a performance test.

(2) (i) *Submission of site-specific test plan.* Before conducting a required performance test, the owner or operator of an affected source shall develop and, if requested by the Administrator, shall submit a site-specific test plan to the Administrator for approval. The test plan shall include a test program summary, the test schedule, data quality objectives, and both an internal and external quality assurance (QA) program. Data quality objectives are the pretest expectations of precision, accuracy, and completeness of data.

(ii) The internal QA program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of test data precision; an example of internal QA is the sampling and analysis of replicate samples.

(iii) The performance testing shall include a test method performance audit (PA) during the performance test. The PAs consist of blind audit samples supplied by an accredited audit sample provider and analyzed during the performance test in order to provide a measure of test data bias. Gaseous audit samples are designed to audit the performance of the sampling system as well as the analytical system and must be collected by the sampling system during the compliance test just as the compliance samples are collected. If a liquid or solid audit sample is designed to audit the sampling system, it must also be collected by the sampling system during the compliance test. If multiple sampling systems or sampling trains are used during the compliance test for any of the test methods, the tester is only required to use one of the sampling systems per method to collect the audit sample. The audit sample must be analyzed by the same analyst using the same analytical reagents and analytical system and at the same time as the compliance samples. Retests are required when there is a failure to produce acceptable results for an audit sample. However, if the audit results do not affect the compliance or noncompliance status of the affected facility, the compliance authority may waive the reanalysis requirement, further audits, or retests and accept the results of the compliance test. Acceptance of the test results shall constitute a waiver of the reanalysis requirement, further audits, or retests. The compliance authority may also use the audit sample failure and the compliance test results as evidence to determine the compliance or noncompliance status of the affected facility. A blind audit sample is a sample whose value is known only to the sample provider and is not revealed to the tested facility until after they report the measured value of the audit sample. For pollutants that exist in the gas phase at ambient temperature, the audit sample shall consist of an appropriate concentration of the pollutant in air or nitrogen that can be introduced into the sampling system of the test method at or near the same entry point as a sample from the emission source. If no gas phase audit samples are available, an acceptable alternative is a sample of the pollutant in the same matrix that would be produced when the sample is recovered from the sampling system as required by the test method. For samples that exist only in a liquid or solid form at ambient temperature, the audit sample shall consist of an appropriate concentration of the pollutant in the same matrix that would be produced when the sample is recovered from the sampling system as required by the test method. An accredited audit

sample provider (AASP) is an organization that has been accredited to prepare audit samples by an independent, third party accrediting body.

(A) The source owner, operator, or representative of the tested facility shall obtain an audit sample, if commercially available, from an AASP for each test method used for regulatory compliance purposes. No audit samples are required for the following test methods: Methods 3A and 3C of appendix A-3 of part 60 of this chapter; Methods 6C, 7E, 9, and 10 of appendix A-4 of part 60; Methods 18 and 19 of appendix A-6 of part 60; Methods 20, 22, and 25A of appendix A-7 of part 60; Methods 30A and 30B of appendix A-8 of part 60; and Methods 303, 318, 320, and 321 of appendix A of this part. If multiple sources at a single facility are tested during a compliance test event, only one audit sample is required for each method used during a compliance test. The compliance authority responsible for the compliance test may waive the requirement to include an audit sample if they believe that an audit sample is not necessary. "Commercially available" means that two or more independent AASPs have blind audit samples available for purchase. If the source owner, operator, or representative cannot find an audit sample for a specific method, the owner, operator, or representative shall consult the EPA Web site at the following URL, *www.epa.gov/ttn/emc,* to confirm whether there is a source that can supply an audit sample for that method. If the EPA Web site does not list an available audit sample at least 60 days prior to the beginning of the compliance test, the source owner, operator, or representative shall not be required to include an audit sample as part of the quality assurance program for the compliance test. When ordering an audit sample, the source owner, operator, or representative shall give the sample provider an estimate for the concentration of each pollutant that is emitted by the source or the estimated concentration of each pollutant based on the permitted level and the name, address, and phone number of the compliance authority. The source owner, operator, or representative shall report the results for the audit sample along with a summary of the emission test results for the audited pollutant to the compliance authority and shall report the results of the audit sample to the AASP. The source owner, operator, or representative shall make both reports at the same time and in the same manner or shall report to the compliance authority first and then report to the AASP. If the method being audited is a method that allows the samples to be analyzed in the field and the tester plans to analyze the samples in the field, the tester may analyze the audit samples prior to collecting the emission samples provided a representative of the compliance authority is present at the testing site. The tester may request, and the compliance authority may grant, a waiver to the requirement that a representative of the compliance authority must be present at the testing site during the field analysis of an audit sample. The source owner, operator, or representative may report the results of the audit sample to the compliance authority and then report the results of the audit sample to the AASP prior to collecting any emission samples. The test protocol and final test report shall document whether an audit sample was ordered and utilized and the pass/fail results as applicable.

(B) An AASP shall have and shall prepare, analyze, and report the true value of audit samples in accordance with a written technical criteria document that describes how audit samples will be prepared and distributed in a manner that will ensure the integrity of the audit sample program. An acceptable technical criteria document shall contain standard operating procedures for all of the following operations:

(*1*) Preparing the sample;

(*2*) Confirming the true concentration of the sample;

(*3*) Defining the acceptance limits for the results from a well-qualified tester. This procedure must use well established statistical methods to analyze historical results from well qualified testers. The acceptance limits shall be set so that there is 95 percent confidence that 90 percent of well qualified labs will produce future results that are within the acceptance limit range;

(*4*) Providing the opportunity for the compliance authority to comment on the selected concentration level for an audit sample;

(*5*) Distributing the sample to the user in a manner that guarantees that the true value of the sample is unknown to the user;

(*6*) Recording the measured concentration reported by the user and determining if the measured value is within acceptable limits;

(*7*) Reporting the results from each audit sample in a timely manner to the compliance authority and to the source owner, operator, or representative by the AASP. The AASP shall make both reports at the same time and in the same manner or shall report to the compliance authority first and then report to the source owner, operator, or representative. The results shall include the name of the facility tested, the date on which the compliance test was conducted, the name of the company performing the sample collection, the name of the company that analyzed the compliance samples including the audit sample, the measured result for the audit sample, and whether the testing company passed or failed the audit. The AASP shall report the true value of the audit sample to the compliance authority. The AASP may report the true value to the source owner, operator, or representative if the AASP's operating plan ensures that no laboratory will receive the same audit sample twice.

(*8*) Evaluating the acceptance limits of samples at least once every two years to determine in consultation with the voluntary consensus standard body if they should be changed.

(*9*) Maintaining a database, accessible to the compliance authorities, of results from the audit that shall include the name of the facility tested, the date on which the compliance test was conducted, the name of the company performing the sample collection, the name of the company that analyzed the compliance samples including the audit sample, the measured result for the audit sample, the true value of the audit sample, the acceptance range for the measured value, and whether the testing company passed or failed the audit.

(C) The accrediting body shall have a written technical criteria document that describes how it will ensure that the AASP is operating in accordance with the AASP technical criteria document that describes how audit samples are to be prepared and distributed. This document shall contain standard operating procedures for all of the following operations:

(*1*) Checking audit samples to confirm their true value as reported by the AASP.

(*2*) Performing technical systems audits of the AASP's facilities and operating procedures at least once every two years.

(*3*) Providing standards for use by the voluntary consensus standard body to approve the accrediting body that will accredit the audit sample providers.

(D) The technical criteria documents for the accredited sample providers and the accrediting body shall be developed through a public process guided by a voluntary consensus standards body (VCSB). The VCSB shall operate in accordance with the procedures and requirements in the Office of Management and Budget *Circular A-119.* A copy of Circular A-119 is available upon request by writing the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW., Washington, DC 20503, by calling (202) 395-6880 or downloading online at *http://standards.gov/standards_gov/a119.cfm.*

The VCSB shall approve all accrediting bodies. The Administrator will review all technical criteria documents. If the technical criteria documents do not meet the minimum technical requirements in paragraphs (c)(2)(iii)(B) through (C) of this section, the technical criteria documents are not acceptable and the proposed audit sample program is not capable of producing audit samples of sufficient quality to be used in a compliance test. All acceptable technical criteria documents shall be posted on the EPA Web site at the following URL, *http://www.epa.gov/ttn/emc.*

(iv) The owner or operator of an affected source shall submit the site-specific test plan to the Administrator upon the Administrator's request at least 60 calendar days before the performance test is scheduled to take place, that is, simultaneously with the notification of intention to conduct a performance test required under paragraph (b) of this section, or on a mutually agreed upon date.

(v) The Administrator may request additional relevant information after the submittal of a site-specific test plan.

(3) *Approval of site-specific test plan.*

(i) The Administrator will notify the owner or operator of approval or intention to deny approval of the site-specific test plan (if review of the site-specific test plan is requested) within 30 calendar days after receipt of the original plan and within 30 calendar days after receipt of any supplementary information that is submitted under paragraph (c)(3)(i)(B) of this section. Before disapproving any site-specific test plan, the Administrator will notify the applicant of the Administrator's intention to disapprove the plan together with -

(A) Notice of the information and findings on which the intended disapproval is based; and

(B) Notice of opportunity for the owner or operator to present, within 30 calendar days after he/she is notified of the intended disapproval, additional information to the Administrator before final action on the plan.

(ii) In the event that the Administrator fails to approve or disapprove the site-specific test plan within the time period specified in paragraph (c)(3)(i) of this section, the following conditions shall apply:

(A) If the owner or operator intends to demonstrate compliance using the test method(s) specified in the relevant standard or with only minor changes to those tests methods (see paragraph (e)(2)(i) of this section), the owner or operator must conduct the performance test within the time specified in this section using the specified method(s);

(B) If the owner or operator intends to demonstrate compliance by using an alternative to any test method specified in the relevant standard, the owner or operator is authorized to conduct the performance test using an alternative test method after the Administrator approves the use of the alternative method when the Administrator approves the site-specific test plan (if review of the site-specific test plan is requested) or after the alternative method is approved (see paragraph (f) of this section). However, the owner or operator is authorized to conduct the performance test using an alternative method in the absence of notification of approval 45 days after submission of the site-specific test plan or request to use an alternative method. The owner or operator is authorized to conduct the performance test within 60 calendar days after he/she is authorized to demonstrate compliance using an alternative test method. Notwithstanding the requirements in the preceding three sentences, the owner or operator may proceed to conduct the performance test as required in this section (without the Administrator's prior approval of the site-specific test plan) if

he/she subsequently chooses to use the specified testing and monitoring methods instead of an alternative.

(iii) Neither the submission of a site-specific test plan for approval, nor the Administrator's approval or disapproval of a plan, nor the Administrator's failure to approve or disapprove a plan in a timely manner shall -

(A) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or with any other applicable Federal, State, or local requirement; or

(B) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

(d) *Performance testing facilities.* If required to do performance testing, the owner or operator of each new source and, at the request of the Administrator, the owner or operator of each existing source, shall provide performance testing facilities as follows:

(1) Sampling ports adequate for test methods applicable to such source. This includes:

(i) Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

(ii) Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures;

(2) Safe sampling platform(s);

(3) Safe access to sampling platform(s);

(4) Utilities for sampling and testing equipment; and

(5) Any other facilities that the Administrator deems necessary for safe and adequate testing of a source.

(e) *Conduct of performance tests.*

(1) Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance (i.e., performance based on normal operating conditions) of the affected source. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test, nor shall emissions in excess of the level of the relevant standard during periods of startup, shutdown, and malfunction be considered a violation of the relevant standard unless otherwise specified in the relevant standard or a determination of noncompliance is made under § 63.6(e). Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(2) Performance tests shall be conducted and data shall be reduced in accordance with the test methods and procedures set forth in this section, in each relevant standard, and, if required, in applicable appendices of parts 51, 60, 61, and 63 of this chapter unless the Administrator -

(i) Specifies or approves, in specific cases, the use of a test method with minor changes in methodology (see definition in § 63.90(a)). Such changes may be approved in conjunction with approval of the site-specific test plan (see paragraph (c) of this section); or

(ii) Approves the use of an intermediate or major change or alternative to a test method (see definitions in § 63.90(a)), the results of which the Administrator has determined to be adequate for indicating whether a specific affected source is in compliance; or

(iii) Approves shorter sampling times or smaller sample volumes when necessitated by process variables or other factors; or

(iv) Waives the requirement for performance tests because the owner or operator of an affected source has demonstrated by other means to the Administrator's satisfaction that the affected source is in compliance with the relevant standard.

(3) Unless otherwise specified in a relevant standard or test method, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the relevant standard. For the purpose of determining compliance with a relevant standard, the arithmetic mean of the results of the three runs shall apply. Upon receiving approval from the Administrator, results of a test run may be replaced with results of an additional test run in the event that -

(i) A sample is accidentally lost after the testing team leaves the site; or

(ii) Conditions occur in which one of the three runs must be discontinued because of forced shutdown; or

(iii) Extreme meteorological conditions occur; or

(iv) Other circumstances occur that are beyond the owner or operator's control.

(4) Nothing in paragraphs (e)(1) through (e)(3) of this section shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

(f) *Use of an alternative test method* -

(1) *General.* Until authorized to use an intermediate or major change or alternative to a test method, the owner or operator of an affected source remains subject to the requirements of this section and the relevant standard.

(2) The owner or operator of an affected source required to do performance testing by a relevant standard may use an alternative test method from that specified in the standard provided that the owner or operator -

(i) Notifies the Administrator of his or her intention to use an alternative test method at least 60 days before the performance test is scheduled to begin;

(ii) Uses Method 301 in appendix A of this part to validate the alternative test method. This may include the use of specific procedures of Method 301 if use of such procedures are sufficient to validate the alternative test method; and

(iii) Submits the results of the Method 301 validation process along with the notification of intention and the justification for not using the specified test method. The owner or operator may submit the information required in this paragraph well in advance of the deadline specified in paragraph (f)(2)(i) of this section to ensure a timely review by the Administrator in order to meet the performance test date specified in this section or the relevant standard.

(3) The Administrator will determine whether the owner or operator's validation of the proposed alternative test method is adequate and issue an approval or disapproval of the alternative test method. If the owner or operator intends to demonstrate compliance by using an alternative to any test method specified in the relevant standard, the owner or operator is authorized to conduct the performance test using an alternative test method after the Administrator approves the use of the alternative method. However, the owner or operator is authorized to conduct the performance test using an alternative method in the absence of notification of approval/disapproval 45 days after submission of the request to use an alternative method and the request satisfies the requirements in paragraph (f)(2) of this section. The owner or operator is authorized to conduct the performance test within 60 calendar days after he/she is authorized to demonstrate compliance using an alternative test method. Notwithstanding the requirements in the preceding three sentences, the owner or operator may proceed to conduct the performance test as

required in this section (without the Administrator's prior approval of the site-specific test plan) if he/she subsequently chooses to use the specified testing and monitoring methods instead of an alternative.

(4) If the Administrator finds reasonable grounds to dispute the results obtained by an alternative test method for the purposes of demonstrating compliance with a relevant standard, the Administrator may require the use of a test method specified in a relevant standard.

(5) If the owner or operator uses an alternative test method for an affected source during a required performance test, the owner or operator of such source shall continue to use the alternative test method for subsequent performance tests at that affected source until he or she receives approval from the Administrator to use another test method as allowed under § 63.7(f).

(6) Neither the validation and approval process nor the failure to validate an alternative test method shall abrogate the owner or operator's responsibility to comply with the requirements of this part.

(g) *Data analysis, recordkeeping, and reporting.*

(1) Unless otherwise specified in a relevant standard or test method, or as otherwise approved by the Administrator in writing, results of a performance test shall include the analysis of samples, determination of emissions, and raw data. A performance test is “completed” when field sample collection is terminated. The owner or operator of an affected source shall report the results of the performance test to the Administrator before the close of business on the 60th day following the completion of the performance test, unless specified otherwise in a relevant standard or as approved otherwise in writing by the Administrator (see § 63.9(i)). The results of the performance test shall be submitted as part of the notification of compliance status required under § 63.9(h). Before a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall send the results of the performance test to the Administrator. After a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall send the results of the performance test to the appropriate permitting authority.

(2) Contents of a performance test, CMS performance evaluation, or CMS quality assurance test report (electronic or paper submitted copy). Unless otherwise specified in a relevant standard, test method, CMS performance specification, or quality assurance requirement for a CMS, or as otherwise approved by the Administrator in writing, the report shall include the elements identified in paragraphs (g)(2)(i) through (vi) of this section.

(i) General identification information for the facility including a mailing address, the physical address, the owner or operator or responsible official (where applicable) and his/her email address, and the appropriate Federal Registry System (FRS) number for the facility.

(ii) Purpose of the test including the applicable regulation requiring the test, the pollutant(s) and other parameters being measured, the applicable emission standard, and any process parameter component, and a brief process description.

(iii) Description of the emission unit tested including fuel burned, control devices, and vent characteristics; the appropriate source classification code (SCC); the permitted maximum process rate (where applicable); and the sampling location.

(iv) Description of sampling and analysis procedures used and any modifications to standard procedures, quality assurance procedures and results, record of process operating conditions that demonstrate the applicable test conditions are met, and values for any operating parameters for which limits were being set during the test.

(v) Where a test method, CEMS, PEMS, or COMS performance specification, or on-going quality assurance requirement for a CEMS, PEMS, or COMS requires you record or report, the following

shall be included in your report: Record of preparation of standards, record of calibrations, raw data sheets for field sampling, raw data sheets for field and laboratory analyses, chain-of-custody documentation, and example calculations for reported results.

(vi) Identification of the company conducting the performance test including the primary office address, telephone number, and the contact for this test including his/her email address.

(3) For a minimum of 5 years after a performance test is conducted, the owner or operator shall retain and make available, upon request, for inspection by the Administrator the records or results of such performance test and other data needed to determine emissions from an affected source.

(h) *Waiver of performance tests.*

(1) Until a waiver of a performance testing requirement has been granted by the Administrator under this paragraph, the owner or operator of an affected source remains subject to the requirements of this section.

(2) Individual performance tests may be waived upon written application to the Administrator if, in the Administrator's judgment, the source is meeting the relevant standard(s) on a continuous basis, or the source is being operated under an extension of compliance, or the owner or operator has requested an extension of compliance and the Administrator is still considering that request.

(3) *Request to waive a performance test.*

(i) If a request is made for an extension of compliance under § 63.6(i), the application for a waiver of an initial performance test shall accompany the information required for the request for an extension of compliance. If no extension of compliance is requested or if the owner or operator has requested an extension of compliance and the Administrator is still considering that request, the application for a waiver of an initial performance test shall be submitted at least 60 days before the performance test if the site-specific test plan under paragraph (c) of this section is not submitted.

(ii) If an application for a waiver of a subsequent performance test is made, the application may accompany any required compliance progress report, compliance status report, or excess emissions and continuous monitoring system performance report [such as those required under § 63.6(i), § 63.9(h), and § 63.10(e) or specified in a relevant standard or in the source's title V permit], but it shall be submitted at least 60 days before the performance test if the site-specific test plan required under paragraph (c) of this section is not submitted.

(iii) Any application for a waiver of a performance test shall include information justifying the owner or operator's request for a waiver, such as the technical or economic infeasibility, or the impracticality, of the affected source performing the required test.

(4) *Approval of request to waive performance test.* The Administrator will approve or deny a request for a waiver of a performance test made under paragraph (h)(3) of this section when he/she -

(i) Approves or denies an extension of compliance under § 63.6(i)(8); or

(ii) Approves or disapproves a site-specific test plan under § 63.7(c)(3); or

(iii) Makes a determination of compliance following the submission of a required compliance status report or excess emissions and continuous monitoring systems performance report; or

(iv) Makes a determination of suitable progress towards compliance following the submission of a compliance progress report, whichever is applicable.

(5) Approval of any waiver granted under this section shall not abrogate the Administrator's authority under the Act or in any way prohibit the Administrator from later canceling the waiver. The cancellation will be made only after notice is given to the owner or operator of the affected source.

§ 63.8 Monitoring requirements.

(a) *Applicability.*

(1) The applicability of this section is set out in § 63.1(a)(4).

(2) For the purposes of this part, all CMS required under relevant standards shall be subject to the provisions of this section upon promulgation of performance specifications for CMS as specified in the relevant standard or otherwise by the Administrator.

(3) [Reserved]

(4) Additional monitoring requirements for control devices used to comply with provisions in relevant standards of this part are specified in § 63.11.

(b) *Conduct of monitoring.*

(1) Monitoring shall be conducted as set forth in this section and the relevant standard(s) unless the Administrator -

(i) Specifies or approves the use of minor changes in methodology for the specified monitoring requirements and procedures (see § 63.90(a) for definition); or

(ii) Approves the use of an intermediate or major change or alternative to any monitoring requirements or procedures (see § 63.90(a) for definition).

(iii) Owners or operators with flares subject to § 63.11(b) are not subject to the requirements of this section unless otherwise specified in the relevant standard.

(2) (i) When the emissions from two or more affected sources are combined before being released to the atmosphere, the owner or operator may install an applicable CMS for each emission stream or for the combined emissions streams, provided the monitoring is sufficient to demonstrate compliance with the relevant standard.

(ii) If the relevant standard is a mass emission standard and the emissions from one affected source are released to the atmosphere through more than one point, the owner or operator must install an applicable CMS at each emission point unless the installation of fewer systems is -

(A) Approved by the Administrator; or

(B) Provided for in a relevant standard (e.g., instead of requiring that a CMS be installed at each emission point before the effluents from those points are channeled to a common control device, the standard specifies that only one CMS is required to be installed at the vent of the control device).

(3) When more than one CMS is used to measure the emissions from one affected source (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required for each CMS. However, when one CMS is used as a backup to another CMS, the owner or operator shall report the results from the CMS used to meet the monitoring requirements of this part. If both such CMS are used during a particular reporting period to meet the monitoring requirements of this part, then the owner or operator shall report the results from each CMS for the relevant compliance period.

(c) *Operation and maintenance of continuous monitoring systems.*

(1) The owner or operator of an affected source shall maintain and operate each CMS as specified in this section, or in a relevant standard, and in a manner consistent with good air pollution control practices.

(i) The owner or operator of an affected source must maintain and operate each CMS as specified in § 63.6(e)(1).

(ii) The owner or operator must keep the necessary parts for routine repairs of the affected CMS equipment readily available.

(iii) The owner or operator of an affected source must develop a written startup, shutdown, and malfunction plan for CMS as specified in § 63.6(e)(3).

(2) (i) All CMS must be installed such that representative measures of emissions or process parameters from the affected source are obtained. In addition, CEMS must be located according to procedures contained in the applicable performance specification(s).

(ii) Unless the individual subpart states otherwise, the owner or operator must ensure the read out (that portion of the CMS that provides a visual display or record), or other indication of operation, from any CMS required for compliance with the emission standard is readily accessible on site for operational control or inspection by the operator of the equipment.

(3) All CMS shall be installed, operational, and the data verified as specified in the relevant standard either prior to or in conjunction with conducting performance tests under § 63.7. Verification of operational status shall, at a minimum, include completion of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system.

(4) Except for system breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level calibration drift adjustments, all CMS, including COMS and CEMS, shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

(i) All COMS shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(ii) All CEMS for measuring emissions other than opacity shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(5) Unless otherwise approved by the Administrator, minimum procedures for COMS shall include a method for producing a simulated zero opacity condition and an upscale (high-level) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of all the analyzer's internal optical surfaces and all electronic circuitry, including the lamp and photodetector assembly normally used in the measurement of opacity.

(6) The owner or operator of a CMS that is not a CPMS, which is installed in accordance with the provisions of this part and the applicable CMS performance specification(s), must check the zero (low-level) and high-level calibration drifts at least once daily in accordance with the written procedure specified in the performance evaluation plan developed under paragraphs (e)(3)(i) and (ii) of this section. The zero (low-level) and high-level calibration drifts must be adjusted, at a minimum, whenever the 24-hour zero (low-level) drift exceeds two times the limits of the applicable performance specification(s) specified in the relevant standard. The system shall allow the amount of excess zero (low-level) and high-level drift measured at the 24-hour interval checks to be recorded and quantified whenever specified. For COMS, all optical and instrumental surfaces exposed to the effluent gases must be cleaned prior to performing the zero (low-level) and high-level drift adjustments; the optical surfaces and instrumental surfaces must be cleaned when the cumulative automatic zero compensation, if applicable, exceeds 4 percent opacity. The CPMS must be calibrated prior to use for the purposes of complying with this section. The CPMS must be checked daily for indication that the system is responding. If the CPMS system includes an internal system check, results must be recorded and checked daily for proper operation.

(7) (i) A CMS is out of control if -

(A) The zero (low-level), mid-level (if applicable), or high-level calibration drift (CD) exceeds two times the applicable CD specification in the applicable performance specification or in the relevant standard; or

(B) The CMS fails a performance test audit (e.g., cylinder gas audit), relative accuracy audit, relative accuracy test audit, or linearity test audit; or

(C) The COMS CD exceeds two times the limit in the applicable performance specification in the relevant standard.

(ii) When the CMS is out of control, the owner or operator of the affected source shall take the necessary corrective action and shall repeat all necessary tests which indicate that the system is out of control. The owner or operator shall take corrective action and conduct retesting until the performance requirements are below the applicable limits. The beginning of the out-of-control period is the hour the owner or operator conducts a performance check (e.g., calibration drift) that indicates an exceedance of the performance requirements established under this part. The end of the out-of-control period is the hour following the completion of corrective action and successful demonstration that the system is within the allowable limits. During the period the CMS is out of control, recorded data shall not be used in data averages and calculations, or to meet any data availability requirement established under this part.

(8) The owner or operator of a CMS that is out of control as defined in paragraph (c)(7) of this section shall submit all information concerning out-of-control periods, including start and end dates and hours and descriptions of corrective actions taken, in the excess emissions and continuous monitoring system performance report required in § 63.10(e)(3).

(d) *Quality control program.*

(1) The results of the quality control program required in this paragraph will be considered by the Administrator when he/she determines the validity of monitoring data.

(2) The owner or operator of an affected source that is required to use a CMS and is subject to the monitoring requirements of this section and a relevant standard shall develop and implement a CMS quality control program. As part of the quality control program, the owner or operator shall develop and submit to the Administrator for approval upon request a site-specific performance evaluation test plan for the CMS performance evaluation required in paragraph (e)(3)(i) of this section, according to the procedures specified in paragraph (e). In addition, each quality control program shall include, at a minimum, a written protocol that describes procedures for each of the following operations:

(i) Initial and any subsequent calibration of the CMS;

(ii) Determination and adjustment of the calibration drift of the CMS;

(iii) Preventive maintenance of the CMS, including spare parts inventory;

(iv) Data recording, calculations, and reporting;

(v) Accuracy audit procedures, including sampling and analysis methods; and

(vi) Program of corrective action for a malfunctioning CMS.

(3) The owner or operator shall keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the Administrator. If the performance evaluation plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. Where relevant, e.g., program of corrective action for a malfunctioning CMS, these written

procedures may be incorporated as part of the affected source's startup, shutdown, and malfunction plan to avoid duplication of planning and recordkeeping efforts.

(e) *Performance evaluation of continuous monitoring systems* -

(1) *General.* When required by a relevant standard, and at any other time the Administrator may require under section 114 of the Act, the owner or operator of an affected source being monitored shall conduct a performance evaluation of the CMS. Such performance evaluation shall be conducted according to the applicable specifications and procedures described in this section or in the relevant standard.

(2) *Notification of performance evaluation.* The owner or operator shall notify the Administrator in writing of the date of the performance evaluation simultaneously with the notification of the performance test date required under § 63.7(b) or at least 60 days prior to the date the performance evaluation is scheduled to begin if no performance test is required.

(3) (i) *Submission of site-specific performance evaluation test plan.* Before conducting a required CMS performance evaluation, the owner or operator of an affected source shall develop and submit a site-specific performance evaluation test plan to the Administrator for approval upon request. The performance evaluation test plan shall include the evaluation program objectives, an evaluation program summary, the performance evaluation schedule, data quality objectives, and both an internal and external QA program. Data quality objectives are the pre-evaluation expectations of precision, accuracy, and completeness of data.

(ii) The internal QA program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of CMS performance. The external QA program shall include, at a minimum, systems audits that include the opportunity for on-site evaluation by the Administrator of instrument calibration, data validation, sample logging, and documentation of quality control data and field maintenance activities.

(iii) The owner or operator of an affected source shall submit the site-specific performance evaluation test plan to the Administrator (if requested) at least 60 days before the performance test or performance evaluation is scheduled to begin, or on a mutually agreed upon date, and review and approval of the performance evaluation test plan by the Administrator will occur with the review and approval of the site-specific test plan (if review of the site-specific test plan is requested).

(iv) The Administrator may request additional relevant information after the submittal of a site-specific performance evaluation test plan.

(v) In the event that the Administrator fails to approve or disapprove the site-specific performance evaluation test plan within the time period specified in § 63.7(c)(3), the following conditions shall apply:

(A) If the owner or operator intends to demonstrate compliance using the monitoring method(s) specified in the relevant standard, the owner or operator shall conduct the performance evaluation within the time specified in this subpart using the specified method(s);

(B) If the owner or operator intends to demonstrate compliance by using an alternative to a monitoring method specified in the relevant standard, the owner or operator shall refrain from conducting the performance evaluation until the Administrator approves the use of the alternative method. If the Administrator does not approve the use of the alternative method within 30 days before the performance evaluation is scheduled to begin, the performance evaluation deadlines specified in paragraph (e)(4) of this section may be extended such that the owner or operator shall conduct the performance evaluation within

60 calendar days after the Administrator approves the use of the alternative method. Notwithstanding the requirements in the preceding two sentences, the owner or operator may proceed to conduct the performance evaluation as required in this section (without the Administrator's prior approval of the site-specific performance evaluation test plan) if he/she subsequently chooses to use the specified monitoring method(s) instead of an alternative.

(vi) Neither the submission of a site-specific performance evaluation test plan for approval, nor the Administrator's approval or disapproval of a plan, nor the Administrator's failure to approve or disapprove a plan in a timely manner shall -

(A) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or with any other applicable Federal, State, or local requirement; or

(B) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

(4) *Conduct of performance evaluation and performance evaluation dates.* The owner or operator of an affected source shall conduct a performance evaluation of a required CMS during any performance test required under § 63.7 in accordance with the applicable performance specification as specified in the relevant standard. Notwithstanding the requirement in the previous sentence, if the owner or operator of an affected source elects to submit COMS data for compliance with a relevant opacity emission standard as provided under § 63.6(h)(7), he/she shall conduct a performance evaluation of the COMS as specified in the relevant standard, before the performance test required under § 63.7 is conducted in time to submit the results of the performance evaluation as specified in paragraph (e)(5)(ii) of this section. If a performance test is not required, or the requirement for a performance test has been waived under § 63.7(h), the owner or operator of an affected source shall conduct the performance evaluation not later than 180 days after the appropriate compliance date for the affected source, as specified in § 63.7(a), or as otherwise specified in the relevant standard.

(5) *Reporting performance evaluation results.*

(i) The owner or operator shall furnish the Administrator a copy of a written report of the results of the performance evaluation containing the information specified in § 63.7(g)(2)(i) through (vi) simultaneously with the results of the performance test required under § 63.7 or within 60 days of completion of the performance evaluation, unless otherwise specified in a relevant standard.

(ii) The owner or operator of an affected source using a COMS to determine opacity compliance during any performance test required under § 63.7 and described in § 63.6(d)(6) shall furnish the Administrator two or, upon request, three copies of a written report of the results of the COMS performance evaluation under this paragraph. The copies shall be provided at least 15 calendar days before the performance test required under § 63.7 is conducted.

(f) *Use of an alternative monitoring method* -

(1) *General.* Until permission to use an alternative monitoring procedure (minor, intermediate, or major changes; see definition in § 63.90(a)) has been granted by the Administrator under this paragraph (f)(1), the owner or operator of an affected source remains subject to the requirements of this section and the relevant standard.

(2) After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring methods or procedures of this part including, but not limited to, the following:

(i) Alternative monitoring requirements when installation of a CMS specified by a relevant standard would not provide accurate measurements due to liquid water or other interferences caused by substances within the effluent gases;

(ii) Alternative monitoring requirements when the affected source is infrequently operated;

(iii) Alternative monitoring requirements to accommodate CEMS that require additional measurements to correct for stack moisture conditions;

(iv) Alternative locations for installing CMS when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements;

(v) Alternate methods for converting pollutant concentration measurements to units of the relevant standard;

(vi) Alternate procedures for performing daily checks of zero (low-level) and high-level drift that do not involve use of high-level gases or test cells;

(vii) Alternatives to the American Society for Testing and Materials (ASTM) test methods or sampling procedures specified by any relevant standard;

(viii) Alternative CMS that do not meet the design or performance requirements in this part, but adequately demonstrate a definite and consistent relationship between their measurements and the measurements of opacity by a system complying with the requirements as specified in the relevant standard. The Administrator may require that such demonstration be performed for each affected source; or

(ix) Alternative monitoring requirements when the effluent from a single affected source or the combined effluent from two or more affected sources is released to the atmosphere through more than one point.

(3) If the Administrator finds reasonable grounds to dispute the results obtained by an alternative monitoring method, requirement, or procedure, the Administrator may require the use of a method, requirement, or procedure specified in this section or in the relevant standard. If the results of the specified and alternative method, requirement, or procedure do not agree, the results obtained by the specified method, requirement, or procedure shall prevail.

(4) (i) *Request to use alternative monitoring procedure.* An owner or operator who wishes to use an alternative monitoring procedure must submit an application to the Administrator as described in paragraph (f)(4)(ii) of this section. The application may be submitted at any time provided that the monitoring procedure is not the performance test method used to demonstrate compliance with a relevant standard or other requirement. If the alternative monitoring procedure will serve as the performance test method that is to be used to demonstrate compliance with a relevant standard, the application must be submitted at least 60 days before the performance evaluation is scheduled to begin and must meet the requirements for an alternative test method under § 63.7(f).

(ii) The application must contain a description of the proposed alternative monitoring system which addresses the four elements contained in the definition of monitoring in § 63.2 and a performance evaluation test plan, if required, as specified in paragraph (e)(3) of this section. In addition, the application must include information justifying the owner or operator's request for an alternative monitoring method, such as the technical or economic infeasibility, or the impracticality, of the affected source using the required method.

(iii) The owner or operator may submit the information required in this paragraph well in advance of the submittal dates specified in paragraph (f)(4)(i) above to ensure a timely review by the

Administrator in order to meet the compliance demonstration date specified in this section or the relevant standard.

(iv) Application for minor changes to monitoring procedures, as specified in paragraph (b)(1) of this section, may be made in the site-specific performance evaluation plan.

(5) *Approval of request to use alternative monitoring procedure.*

(i) The Administrator will notify the owner or operator of approval or intention to deny approval of the request to use an alternative monitoring method within 30 calendar days after receipt of the original request and within 30 calendar days after receipt of any supplementary information that is submitted. If a request for a minor change is made in conjunction with site-specific performance evaluation plan, then approval of the plan will constitute approval of the minor change. Before disapproving any request to use an alternative monitoring method, the Administrator will notify the applicant of the Administrator's intention to disapprove the request together with -

(A) Notice of the information and findings on which the intended disapproval is based; and

(B) Notice of opportunity for the owner or operator to present additional information to the Administrator before final action on the request. At the time the Administrator notifies the applicant of his or her intention to disapprove the request, the Administrator will specify how much time the owner or operator will have after being notified of the intended disapproval to submit the additional information.

(ii) The Administrator may establish general procedures and criteria in a relevant standard to accomplish the requirements of paragraph (f)(5)(i) of this section.

(iii) If the Administrator approves the use of an alternative monitoring method for an affected source under paragraph (f)(5)(i) of this section, the owner or operator of such source shall continue to use the alternative monitoring method until he or she receives approval from the Administrator to use another monitoring method as allowed by § 63.8(f).

(6) *Alternative to the relative accuracy test.* An alternative to the relative accuracy test for CEMS specified in a relevant standard may be requested as follows:

(i) *Criteria for approval of alternative procedures.* An alternative to the test method for determining relative accuracy is available for affected sources with emission rates demonstrated to be less than 50 percent of the relevant standard. The owner or operator of an affected source may petition the Administrator under paragraph (f)(6)(ii) of this section to substitute the relative accuracy test in section 7 of Performance Specification 2 with the procedures in section 10 if the results of a performance test conducted according to the requirements in § 63.7, or other tests performed following the criteria in § 63.7, demonstrate that the emission rate of the pollutant of interest in the units of the relevant standard is less than 50 percent of the relevant standard. For affected sources subject to emission limitations expressed as control efficiency levels, the owner or operator may petition the Administrator to substitute the relative accuracy test with the procedures in section 10 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the CEMS is used continuously to determine compliance with the relevant standard.

(ii) *Petition to use alternative to relative accuracy test.* The petition to use an alternative to the relative accuracy test shall include a detailed description of the procedures to be applied, the location and the procedure for conducting the alternative, the concentration or response levels of the alternative relative accuracy materials, and the other equipment checks included in the alternative procedure(s). The Administrator will review the petition for completeness and applicability. The Administrator's determination to approve an alternative will depend on the

intended use of the CEMS data and may require specifications more stringent than in Performance Specification 2.

(iii) *Rescission of approval to use alternative to relative accuracy test.* The Administrator will review the permission to use an alternative to the CEMS relative accuracy test and may rescind such permission if the CEMS data from a successful completion of the alternative relative accuracy procedure indicate that the affected source's emissions are approaching the level of the relevant standard. The criterion for reviewing the permission is that the collection of CEMS data shows that emissions have exceeded 70 percent of the relevant standard for any averaging period, as specified in the relevant standard. For affected sources subject to emission limitations expressed as control efficiency levels, the criterion for reviewing the permission is that the collection of CEMS data shows that exhaust emissions have exceeded 70 percent of the level needed to meet the control efficiency requirement for any averaging period, as specified in the relevant standard. The owner or operator of the affected source shall maintain records and determine the level of emissions relative to the criterion for permission to use an alternative for relative accuracy testing. If this criterion is exceeded, the owner or operator shall notify the Administrator within 10 days of such occurrence and include a description of the nature and cause of the increased emissions. The Administrator will review the notification and may rescind permission to use an alternative and require the owner or operator to conduct a relative accuracy test of the CEMS as specified in section 7 of Performance Specification 2. The Administrator will review the notification and may rescind permission to use an alternative and require the owner or operator to conduct a relative accuracy test of the CEMS as specified in section 8.4 of Performance Specification 2.

(g) *Reduction of monitoring data.*

(1) The owner or operator of each CMS must reduce the monitoring data as specified in paragraphs (g)(1) through (5) of this section.

(2) The owner or operator of each COMS shall reduce all data to 6-minute averages calculated from 36 or more data points equally spaced over each 6-minute period. Data from CEMS for measurement other than opacity, unless otherwise specified in the relevant standard, shall be reduced to 1-hour averages computed from four or more data points equally spaced over each 1-hour period, except during periods when calibration, quality assurance, or maintenance activities pursuant to provisions of this part are being performed. During these periods, a valid hourly average shall consist of at least two data points with each representing a 15-minute period. Alternatively, an arithmetic or integrated 1-hour average of CEMS data may be used. Time periods for averaging are defined in § 63.2.

(3) The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O_2 or ng/J of pollutant).

(4) All emission data shall be converted into units of the relevant standard for reporting purposes using the conversion procedures specified in that standard. After conversion into units of the relevant standard, the data may be rounded to the same number of significant digits as used in that standard to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).

(5) Monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level adjustments must not be included in any data average computed under this part. For the owner or operator complying with the requirements of § 63.10(b)(2)(vii)(A) or (B), data averages must include any data recorded during periods of monitor breakdown or malfunction.

§ 63.9 Notification requirements.

(a) *Applicability and general information.*

(1) The applicability of this section is set out in § 63.1(a)(4).

(2) For affected sources that have been granted an extension of compliance under subpart D of this part, the requirements of this section do not apply to those sources while they are operating under such compliance extensions.

(3) If any State requires a notice that contains all the information required in a notification listed in this section, the owner or operator may send the Administrator a copy of the notice sent to the State to satisfy the requirements of this section for that notification.

(4) (i) Before a State has been delegated the authority to implement and enforce notification requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit notifications to the appropriate Regional Office of the EPA (to the attention of the Director of the Division indicated in the list of the EPA Regional Offices in § 63.13).

(ii) After a State has been delegated the authority to implement and enforce notification requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit notifications to the delegated State authority (which may be the same as the permitting authority). In addition, if the delegated (permitting) authority is the State, the owner or operator shall send a copy of each notification submitted to the State to the appropriate Regional Office of the EPA, as specified in paragraph (a)(4)(i) of this section. The Regional Office may waive this requirement for any notifications at its discretion.

(b) *Initial notifications.*

(1) (i) The requirements of this paragraph apply to the owner or operator of an affected source when such source becomes subject to a relevant standard.

(ii) If an area source subsequently becomes a major source that is subject to the emission standard or other requirement, such source shall be subject to the notification requirements of this section. Area sources previously subject to major source requirements that become major sources again are also subject to the notification requirements of this paragraph and must submit the notification according to the requirements of paragraph (k) of this section.

(iii) Affected sources that are required under this paragraph to submit an initial notification may use the application for approval of construction or reconstruction under § 63.5(d) of this subpart, if relevant, to fulfill the initial notification requirements of this paragraph.

(2) The owner or operator of an affected source that has an initial startup before the effective date of a relevant standard under this part shall notify the Administrator in writing that the source is subject to the relevant standard. The notification, which shall be submitted not later than 120 calendar days after the effective date of the relevant standard (or within 120 calendar days after the source becomes subject to the relevant standard), shall provide the following information:

(i) The name and address of the owner or operator;

(ii) The address (i.e., physical location) of the affected source;

(iii) An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date;

(iv) A brief description of the nature, size, design, and method of operation of the source and an identification of the types of emission points within the affected source subject to the relevant standard and types of hazardous air pollutants emitted; and

(v) A statement of whether the affected source is a major source or an area source.

(3) [Reserved]

(4) The owner or operator of a new or reconstructed major affected source for which an application for approval of construction or reconstruction is required under § 63.5(d) must provide the following information in writing to the Administrator:

(i) A notification of intention to construct a new major-emitting affected source, reconstruct a major-emitting affected source, or reconstruct a major source such that the source becomes a major-emitting affected source with the application for approval of construction or reconstruction as specified in § 63.5(d)(1)(i); and

(ii)-(iv) [Reserved]

(v) A notification of the actual date of startup of the source, delivered or postmarked within 15 calendar days after that date.

(5) The owner or operator of a new or reconstructed affected source for which an application for approval of construction or reconstruction is not required under § 63.5(d) must provide the following information in writing to the Administrator:

(i) A notification of intention to construct a new affected source, reconstruct an affected source, or reconstruct a source such that the source becomes an affected source, and

(ii) A notification of the actual date of startup of the source, delivered or postmarked within 15 calendar days after that date.

(iii) Unless the owner or operator has requested and received prior permission from the Administrator to submit less than the information in § 63.5(d), the notification must include the information required on the application for approval of construction or reconstruction as specified in § 63.5(d)(1)(i).

(c) *Request for extension of compliance.* If the owner or operator of an affected source cannot comply with a relevant standard by the applicable compliance date for that source, or if the owner or operator has installed BACT or technology to meet LAER consistent with § 63.6(i)(5) of this subpart, he/she may submit to the Administrator (or the State with an approved permit program) a request for an extension of compliance as specified in § 63.6(i)(4) through § 63.6(i)(6).

(d) *Notification that source is subject to special compliance requirements.* An owner or operator of a new source that is subject to special compliance requirements as specified in § 63.6(b)(3) and § 63.6(b)(4) shall notify the Administrator of his/her compliance obligations not later than the notification dates established in paragraph (b) of this section for new sources that are not subject to the special provisions.

(e) *Notification of performance test.* The owner or operator of an affected source shall notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin to allow the Administrator to review and approve the site-specific test plan required under § 63.7(c), if requested by the Administrator, and to have an observer present during the test.

(f) *Notification of opacity and visible emission observations.* The owner or operator of an affected source shall notify the Administrator in writing of the anticipated date for conducting the opacity or visible emission observations specified in § 63.6(h)(5), if such observations are required for the source by a relevant standard. The notification shall be submitted with the notification of the performance test date, as specified in paragraph (e) of this section, or if no performance test is required or visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the initial performance test required under § 63.7, the owner or operator shall deliver or postmark the notification not less than 30 days before the opacity or visible emission observations are scheduled to take place.

(g) *Additional notification requirements for sources with continuous monitoring systems.* The owner or operator of an affected source required to use a CMS by a relevant standard shall furnish the Administrator written notification as follows:

(1) A notification of the date the CMS performance evaluation under § 63.8(e) is scheduled to begin, submitted simultaneously with the notification of the performance test date required under § 63.7(b). If no performance test is required, or if the requirement to conduct a performance test has been waived for an affected source under § 63.7(h), the owner or operator shall notify the Administrator in writing of the date of the performance evaluation at least 60 calendar days before the evaluation is scheduled to begin;

(2) A notification that COMS data results will be used to determine compliance with the applicable opacity emission standard during a performance test required by § 63.7 in lieu of Method 9 or other opacity emissions test method data, as allowed by § 63.6(h)(7)(ii), if compliance with an opacity emission standard is required for the source by a relevant standard. The notification shall be submitted at least 60 calendar days before the performance test is scheduled to begin; and

(3) A notification that the criterion necessary to continue use of an alternative to relative accuracy testing, as provided by § 63.8(f)(6), has been exceeded. The notification shall be delivered or postmarked no later than 10 days after the occurrence of such exceedance, and it shall include a description of the nature and cause of the increased emissions.

(h) *Notification of compliance status.*

(1) The requirements of paragraphs (h)(2) through (h)(4) of this section apply when an affected source becomes subject to a relevant standard.

(2) (i) Before a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this part, the owner or operator of such source shall submit to the Administrator a notification of compliance status, signed by the responsible official who shall certify its accuracy, attesting to whether the source has complied with the relevant standard. The notification shall list -

(A) The methods that were used to determine compliance;

(B) The results of any performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;

(C) The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;

(D) The type and quantity of hazardous air pollutants emitted by the source (or surrogate pollutants if specified in the relevant standard), reported in units and averaging times and in accordance with the test methods specified in the relevant standard;

(E) If the relevant standard applies to both major and area sources, an analysis demonstrating whether the affected source is a major source (using the emissions data generated for this notification);

(F) A description of the air pollution control equipment (or method) for each emission point, including each control device (or method) for each hazardous air pollutant and the control efficiency (percent) for each control device (or method); and

(G) A statement by the owner or operator of the affected existing, new, or reconstructed source as to whether the source has complied with the relevant standard or other requirements.

(ii) The notification must be sent before the close of business on the 60th day following the completion of the relevant compliance demonstration activity specified in the relevant standard (unless a different reporting period is specified in the standard, in which case the letter must be sent before the close of business on the day the report of the relevant testing or monitoring results is required to be delivered or postmarked). For example, the notification shall be sent before close of business on the 60th (or other required) day following completion of the initial performance test and again before the close of business on the 60th (or other required) day following the completion of any subsequent required performance test. If no performance test is required but opacity or visible emission observations are required to demonstrate compliance with an opacity or visible emission standard under this part, the notification of compliance status shall be sent before close of business on the 30th day following the completion of opacity or visible emission observations. Notifications may be combined as long as the due date requirement for each notification is met.

(3) After a title V permit has been issued to the owner or operator of an affected source, the owner or operator of such source shall comply with all requirements for compliance status reports contained in the source's title V permit, including reports required under this part. After a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this part, the owner or operator of such source shall submit the notification of compliance status to the appropriate permitting authority following completion of the relevant compliance demonstration activity specified in the relevant standard.

(4) [Reserved]

(5) If an owner or operator of an affected source submits estimates or preliminary information in the application for approval of construction or reconstruction required in § 63.5(d) in place of the actual emissions data or control efficiencies required in paragraphs (d)(1)(ii)(H) and (d)(2) of § 63.5, the owner or operator shall submit the actual emissions data and other correct information as soon as available but no later than with the initial notification of compliance status required in this section.

(6) Advice on a notification of compliance status may be obtained from the Administrator.

(i) *Adjustment to time periods or postmark deadlines for submittal and review of required communications.*

(1) (i) Until an adjustment of a time period or postmark deadline has been approved by the Administrator under paragraphs (i)(2) and (i)(3) of this section, the owner or operator of an affected source remains strictly subject to the requirements of this part.

(ii) An owner or operator shall request the adjustment provided for in paragraphs (i)(2) and (i)(3) of this section each time he or she wishes to change an applicable time period or postmark deadline specified in this part.

(2) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. An owner or operator who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as practicable before the subject activity is required to take place. The owner or operator shall include in the request whatever information he or she considers useful to convince the Administrator that an adjustment is warranted.

(3) If, in the Administrator's judgment, an owner or operator's request for an adjustment to a particular time period or postmark deadline is warranted, the Administrator will approve the adjustment. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an adjustment within 15 calendar days of receiving sufficient information to evaluate the request.

(4) If the Administrator is unable to meet a specified deadline, he or she will notify the owner or operator of any significant delay and inform the owner or operator of the amended schedule.

(j) *Change in information already provided.* Any change in the information already provided under this section shall be provided to the Administrator within 15 calendar days after the change. The owner or operator of a major source that reclassifies to area source status is also subject to the notification requirements of this paragraph. The owner or operator may submit the application for reclassification with the regulatory authority (*e.g.,* permit application) according to paragraph (k) of this section to fulfill the requirements of this paragraph, but the information required in paragraphs (j)(1) through (4) of this section must be included. A source which reclassified after January 25, 2018, and before January 19, 2021, and has not yet provided the notification of a change in information is required to provide such notification no later than February 2, 2021, according to the requirements of paragraph (k) of this section. Beginning January 19, 2021, the owner or operator of a major source that reclassifies to area source status must submit the notification according to the requirements of paragraph (k) of this section. A notification of reclassification must contain the following information:

(1) The name and address of the owner or operator;

(2) The address (*i.e.,* physical location) of the affected source;

(3) An identification of the standard being reclassified from and to (if applicable); and

(4) Date of effectiveness of the reclassification.

(k) *Electronic submission of notifications or reports.* If you are required to submit notifications or reports following the procedure specified in this paragraph (k), you must submit notifications or reports to the EPA via the EPA's Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). The notification or report must be submitted by the deadline specified. The EPA will make all the information submitted through CEDRI available to the public without further notice to you. Do not use CEDRI to submit information you claim as confidential business information (CBI). Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim for some of the information in the report or notification, you must submit the information claimed to be CBI according to the procedures in paragraph (k)(3) of this section.

(1) If you are required to electronically submit a notification or report by this paragraph (k) through CEDRI in the EPA's CDX, you may assert a claim of EPA system outage for failure to timely comply with the electronic submittal requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in paragraphs (k)(1)(i) through (vii) of this section.

(i) You must have been or will be precluded from accessing CEDRI and submitting a required notification or report within the time prescribed due to an outage of either the EPA's CEDRI or CDX systems.

(ii) The outage must have occurred within the period of time beginning 5 business days prior to the date that the notification or report is due.

(iii) The outage may be planned or unplanned.

(iv) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(v) You must provide to the Administrator a written description identifying:

(A) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable;

(B) A rationale for attributing the delay in submitting beyond the regulatory deadline to EPA system outage;

(C) Measures taken or to be taken to minimize the delay in submitting; and

(D) The date by which you propose to submit, or if you have already met the electronic submittal requirement in this paragraph (k) at the time of the notification, the date you submitted the notification or report.

(vi) The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(vii) In any circumstance, the notification or report must be submitted electronically as soon as possible after the outage is resolved.

(2) If you are required to electronically submit a notification or report by this paragraph (k) through CEDRI in the EPA's CDX, you may assert a claim of force majeure for failure to timely comply with the electronic submittal requirement. To assert a claim of force majeure, you must meet the requirements outlined in paragraphs (k)(2)(i) through (v) of this section.

(i) You may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a notification or report electronically within the time period prescribed. Examples of such events are acts of nature (*e.g.,* hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (*e.g.,* large scale power outage).

(ii) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in submitting through CEDRI.

(iii) You must provide to the Administrator:

(A) A written description of the force majeure event;

(B) A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event;

(C) Measures taken or to be taken to minimize the delay in reporting; and

(D) The date by which you propose to submit the notification or report, or if you have already met the electronic submittal requirement in this paragraph (k) at the time of the notification, the date you submitted the notification or report.

(iv) The decision to accept the claim of force majeure and allow an extension to the submittal deadline is solely within the discretion of the Administrator.

(v) In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs.

(3) If you wish to assert a CBI claim for some of the information submitted under paragraph (k) of this section, you must submit a complete file, including information claimed to be CBI, to the EPA following the procedures in paragraphs (k)(3)(i) through (iv) of this section. Where a subpart specifies a specific file format

for the report or notification for which you are asserting a claim of CBI, the complete file that you submit under this paragraph (k)(3) must be in the same file format specified in the subpart.

(i) Clearly mark the part or all of the information that you claim to be CBI. Information not marked as CBI may be authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. All CBI claims must be asserted at the time of submission. Anything submitted using CEDRI cannot later be claimed CBI. Furthermore, under CAA section 114(c), emissions data are not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available.

(ii) You must submit the same file submitted to the CBI office with the CBI omitted to the EPA via the EPA's CDX as described in paragraph (k) of this section.

(iii) The preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol, or other online file sharing services. Electronic submissions must be transmitted directly to the OAQPS CBI Office at the email address *oaqpscbi@epa.gov,* and as described above, should include clear CBI markings. Electronic Reporting Tool (ERT) files should be flagged to the attention of the Group Leader, Measurement Policy Group; all other files should be flagged to the attention of the Sector Lead for the subpart for which you are submitting your notification or report. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if you do not have your own file sharing service, please email *oaqpscbi@epa.gov* to request a file transfer link.

(iv) If you cannot transmit the file electronically, you may send CBI information through the postal service to the following address: U.S. EPA, Attn: OAQPS Document Control Officer, Mail Drop: C404-02, 109 T.W. Alexander Drive, P.O. Box 12055, RTP, NC 27711. ERT files should also be flagged to the attention of the Group Leader, Measurement Policy Group; all other files should also be flagged to the attention of the Sector Lead for the subpart for which you are submitting your notification or report. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope.

§ 63.10 Recordkeeping and reporting requirements.

(a) *Applicability and general information.*

(1) The applicability of this section is set out in § 63.1(a)(4).

(2) For affected sources that have been granted an extension of compliance under subpart D of this part, the requirements of this section do not apply to those sources while they are operating under such compliance extensions.

(3) If any State requires a report that contains all the information required in a report listed in this section, an owner or operator may send the Administrator a copy of the report sent to the State to satisfy the requirements of this section for that report.

(4) (i) Before a State has been delegated the authority to implement and enforce recordkeeping and reporting requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit reports to the appropriate Regional Office of the EPA (to the attention of the Director of the Division indicated in the list of the EPA Regional Offices in § 63.13).

(ii) After a State has been delegated the authority to implement and enforce recordkeeping and reporting requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit reports to the delegated State authority (which may be the same as the permitting authority). In addition, if the delegated (permitting) authority is

the State, the owner or operator shall send a copy of each report submitted to the State to the appropriate Regional Office of the EPA, as specified in paragraph (a)(4)(i) of this section. The Regional Office may waive this requirement for any reports at its discretion.

(5) If an owner or operator of an affected source in a State with delegated authority is required to submit periodic reports under this part to the State, and if the State has an established timeline for the submission of periodic reports that is consistent with the reporting frequency(ies) specified for such source under this part, the owner or operator may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the owner or operator and the State. For each relevant standard established pursuant to section 112 of the Act, the allowance in the previous sentence applies in each State beginning 1 year after the affected source's compliance date for that standard. Procedures governing the implementation of this provision are specified in § 63.9(i).

(6) If an owner or operator supervises one or more stationary sources affected by more than one standard established pursuant to section 112 of the Act, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State permitting authority) a common schedule on which periodic reports required for each source shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the latest compliance date for any relevant standard established pursuant to section 112 of the Act for any such affected source(s). Procedures governing the implementation of this provision are specified in § 63.9(i).

(7) If an owner or operator supervises one or more stationary sources affected by standards established pursuant to section 112 of the Act (as amended November 15, 1990) and standards set under part 60, part 61, or both such parts of this chapter, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State permitting authority) a common schedule on which periodic reports required by each relevant (i.e., applicable) standard shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the stationary source is required to be in compliance with the relevant section 112 standard, or 1 year after the stationary source is required to be in compliance with the applicable part 60 or part 61 standard, whichever is latest. Procedures governing the implementation of this provision are specified in § 63.9(i).

(b) *General recordkeeping requirements.*

(1) The owner or operator of an affected source subject to the provisions of this part shall maintain files of all information (including all reports and notifications) required by this part recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

(2) The owner or operator of an affected source subject to the provisions of this part shall maintain relevant records for such source of -

(i) The occurrence and duration of each startup or shutdown when the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards;

(ii) The occurrence and duration of each malfunction of operation (i.e., process equipment) or the required air pollution control and monitoring equipment;

(iii) All required maintenance performed on the air pollution control and monitoring equipment;

(iv) (A) Actions taken during periods of startup or shutdown when the source exceeded applicable emission limitations in a relevant standard and when the actions taken are different from the

procedures specified in the affected source's startup, shutdown, and malfunction plan (see § 63.6(e)(3)); or

(B) Actions taken during periods of malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) when the actions taken are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan (see § 63.6(e)(3));

(v) All information necessary, including actions taken, to demonstrate conformance with the affected source's startup, shutdown, and malfunction plan (see § 63.6(e)(3)) when all actions taken during periods of startup or shutdown (and the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. (The information needed to demonstrate conformance with the startup, shutdown, and malfunction plan may be recorded using a "checklist," or some other effective form of recordkeeping, in order to minimize the recordkeeping burden for conforming events);

(vi) Each period during which a CMS is malfunctioning or inoperative (including out-of-control periods);

(vii) All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report);

(A) This paragraph applies to owners or operators required to install a continuous emissions monitoring system (CEMS) where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(2)(vii) of this section, the owner or operator shall retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.

(B) This paragraph applies to owners or operators required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(2)(vii) of this section, the owner or operator shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator.

(C) The Administrator or delegated authority, upon notification to the source, may require the owner or operator to maintain all measurements as required by paragraph (b)(2)(vii), if the administrator or the delegated authority determines these records are required to more accurately assess the compliance status of the affected source.

(viii) All results of performance tests, CMS performance evaluations, and opacity and visible emission observations;

(ix) All measurements as may be necessary to determine the conditions of performance tests and performance evaluations;

(x) All CMS calibration checks;

(xi) All adjustments and maintenance performed on CMS;

(xii) Any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements under this part, if the source has been granted a waiver under paragraph (f) of this section;

(xiii) All emission levels relative to the criterion for obtaining permission to use an alternative to the relative accuracy test, if the source has been granted such permission under § 63.8(f)(6); and

(xiv) All documentation supporting initial notifications and notifications of compliance status under § 63.9.

(3) If an owner or operator determines that his or her existing or new stationary source is in the source category regulated by a standard established pursuant to section 112 of the Act, but that source is not subject to the relevant standard (or other requirement established under this part) because of enforceable limitations on the source's potential to emit, or the source otherwise qualifies for an exclusion, the owner or operator must keep a record of the applicability determination. The applicability determination must be kept on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source subject to the relevant standard (or other requirement established under this part), whichever comes first if the determination is made prior to January 19, 2021. The applicability determination must be kept until the source changes its operations to become an affected source subject to the relevant standard (or other requirement established under this part) if the determination was made on or after January 19, 2021. The record of the applicability determination must be signed by the person making the determination and include an emissions analysis (or other information) that demonstrates the owner or operator's conclusion that the source is unaffected (*e.g.,* because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the Administrator to make an applicability finding for the source with regard to the relevant standard or other requirement. If applicable, the analysis must be performed in accordance with requirements established in relevant subparts of this part for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with EPA guidance materials published to assist sources in making applicability determinations under section 112 of the Act, if any. The requirements to determine applicability of a standard under § 63.1(b)(3) and to record the results of that determination under this paragraph (b)(3) of this section shall not by themselves create an obligation for the owner or operator to obtain a title V permit.

(c) *Additional recordkeeping requirements for sources with continuous monitoring systems.* In addition to complying with the requirements specified in paragraphs (b)(1) and (b)(2) of this section, the owner or operator of an affected source required to install a CMS by a relevant standard shall maintain records for such source of -

(1) All required CMS measurements (including monitoring data recorded during unavoidable CMS breakdowns and out-of-control periods);

(2)-(4) [Reserved]

(5) The date and time identifying each period during which the CMS was inoperative except for zero (low-level) and high-level checks;

(6) The date and time identifying each period during which the CMS was out of control, as defined in § 63.8(c)(7);

(7) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during startups, shutdowns, and malfunctions of the affected source;

(8) The specific identification (i.e., the date and time of commencement and completion) of each time period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during periods other than startups, shutdowns, and malfunctions of the affected source;

(9) [Reserved]

(10) The nature and cause of any malfunction (if known);

(11) The corrective action taken or preventive measures adopted;

(12) The nature of the repairs or adjustments to the CMS that was inoperative or out of control;

(13) The total process operating time during the reporting period; and

(14) All procedures that are part of a quality control program developed and implemented for CMS under § 63.8(d).

(15) In order to satisfy the requirements of paragraphs (c)(10) through (c)(12) of this section and to avoid duplicative recordkeeping efforts, the owner or operator may use the affected source's startup, shutdown, and malfunction plan or records kept to satisfy the recordkeeping requirements of the startup, shutdown, and malfunction plan specified in § 63.6(e), provided that such plan and records adequately address the requirements of paragraphs (c)(10) through (c)(12).

(d) *General reporting requirements.*

(1) Notwithstanding the requirements in this paragraph or paragraph (e) of this section, and except as provided in § 63.16, the owner or operator of an affected source subject to reporting requirements under this part shall submit reports to the Administrator in accordance with the reporting requirements in the relevant standard(s).

(2) *Reporting results of performance tests.* Before a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall report the results of any performance test under § 63.7 to the Administrator. After a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall report the results of a required performance test to the appropriate permitting authority. The owner or operator of an affected source shall report the results of the performance test to the Administrator (or the State with an approved permit program) before the close of business on the 60th day following the completion of the performance test, unless specified otherwise in a relevant standard or as approved otherwise in writing by the Administrator. The results of the performance test shall be submitted as part of the notification of compliance status required under § 63.9(h).

(3) *Reporting results of opacity or visible emission observations.* The owner or operator of an affected source required to conduct opacity or visible emission observations by a relevant standard shall report the opacity or visible emission results (produced using Test Method 9 or Test Method 22, or an alternative to these test methods) along with the results of the performance test required under § 63.7. If no performance test is required, or if visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the performance test required under § 63.7, the owner or operator shall report the opacity or visible emission results before the close of business on the 30th day following the completion of the opacity or visible emission observations.

(4) *Progress reports.* The owner or operator of an affected source who is required to submit progress reports as a condition of receiving an extension of compliance under § 63.6(i) shall submit such reports to the

Administrator (or the State with an approved permit program) by the dates specified in the written extension of compliance.

(5) (i) *Periodic startup, shutdown, and malfunction reports.* If actions taken by an owner or operator during a startup or shutdown (and the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan (see § 63.6(e)(3)), the owner or operator shall state such information in a startup, shutdown, and malfunction report. Actions taken to minimize emissions during such startups, shutdowns, and malfunctions shall be summarized in the report and may be done in checklist form; if actions taken are the same for each event, only one checklist is necessary. Such a report shall also include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. Reports shall only be required if a startup or shutdown caused the source to exceed any applicable emission limitation in the relevant emission standards, or if a malfunction occurred during the reporting period. The startup, shutdown, and malfunction report shall consist of a letter, containing the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, that shall be submitted to the Administrator semiannually (or on a more frequent basis if specified otherwise in a relevant standard or as established otherwise by the permitting authority in the source's title V permit). The startup, shutdown, and malfunction report shall be delivered or postmarked by the 30th day following the end of each calendar half (or other calendar reporting period, as appropriate). If the owner or operator is required to submit excess emissions and continuous monitoring system performance (or other periodic) reports under this part, the startup, shutdown, and malfunction reports required under this paragraph may be submitted simultaneously with the excess emissions and continuous monitoring system performance (or other) reports. If startup, shutdown, and malfunction reports are submitted with excess emissions and continuous monitoring system performance (or other periodic) reports, and the owner or operator receives approval to reduce the frequency of reporting for the latter under paragraph (e) of this section, the frequency of reporting for the startup, shutdown, and malfunction reports also may be reduced if the Administrator does not object to the intended change. The procedures to implement the allowance in the preceding sentence shall be the same as the procedures specified in paragraph (e)(3) of this section.

(ii) *Immediate startup, shutdown, and malfunction reports.* Notwithstanding the allowance to reduce the frequency of reporting for periodic startup, shutdown, and malfunction reports under paragraph (d)(5)(i) of this section, any time an action taken by an owner or operator during a startup or shutdown that caused the source to exceed any applicable emission limitation in the relevant emission standards, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the owner or operator shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event. The immediate report required under this paragraph (d)(5)(ii) shall consist of a telephone call (or facsimile (FAX) transmission) to the Administrator within 2 working days after commencing actions inconsistent with the plan, and it shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event, that contains the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, describing all excess emissions and/or parameter monitoring exceedances which are believed to have occurred (or could have occurred in the case of malfunctions), and actions taken to minimize emissions in conformance with § 63.6(e)(1)(i). Notwithstanding the requirements of the previous sentence, after the effective date of an approved permit program in the State in which an affected source is located, the owner or operator may make

alternative reporting arrangements, in advance, with the permitting authority in that State. Procedures governing the arrangement of alternative reporting requirements under this paragraph (d)(5)(ii) are specified in § 63.9(i).

(e) *Additional reporting requirements for sources with continuous monitoring systems* -

(1) *General.* When more than one CEMS is used to measure the emissions from one affected source (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required for each CEMS.

(2) *Reporting results of continuous monitoring system performance evaluations.*

(i) The owner or operator of an affected source required to install a CMS by a relevant standard shall furnish the Administrator a copy of a written report of the results of the CMS performance evaluation, as required under § 63.8(e), simultaneously with the results of the performance test required under § 63.7, unless otherwise specified in the relevant standard.

(ii) The owner or operator of an affected source using a COMS to determine opacity compliance during any performance test required under § 63.7 and described in § 63.6(d)(6) shall furnish the Administrator two or, upon request, three copies of a written report of the results of the COMS performance evaluation conducted under § 63.8(e). The copies shall be furnished at least 15 calendar days before the performance test required under § 63.7 is conducted.

(3) *Excess emissions and continuous monitoring system performance report and summary report.*

(i) Excess emissions and parameter monitoring exceedances are defined in relevant standards. The owner or operator of an affected source required to install a CMS by a relevant standard shall submit an excess emissions and continuous monitoring system performance report and/or a summary report to the Administrator semiannually, except when -

(A) More frequent reporting is specifically required by a relevant standard;

(B) The Administrator determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source; or

(C) [Reserved]

(D) The affected source is complying with the Performance Track Provisions of § 63.16, which allows less frequent reporting.

(ii) *Request to reduce frequency of excess emissions and continuous monitoring system performance reports.* Notwithstanding the frequency of reporting requirements specified in paragraph (e)(3)(i) of this section, an owner or operator who is required by a relevant standard to submit excess emissions and continuous monitoring system performance (and summary) reports on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

(A) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected source's excess emissions and continuous monitoring system performance reports continually demonstrate that the source is in compliance with the relevant standard;

(B) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in this subpart and the relevant standard; and

(C) The Administrator does not object to a reduced frequency of reporting for the affected source, as provided in paragraph (e)(3)(iii) of this section.

(iii) The frequency of reporting of excess emissions and continuous monitoring system performance (and summary) reports required to comply with a relevant standard may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the 5-year recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(iv) As soon as CMS data indicate that the source is not in compliance with any emission limitation or operating parameter specified in the relevant standard, the frequency of reporting shall revert to the frequency specified in the relevant standard, and the owner or operator shall submit an excess emissions and continuous monitoring system performance (and summary) report for the noncomplying emission points at the next appropriate reporting period following the noncomplying event. After demonstrating ongoing compliance with the relevant standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard, as provided for in paragraphs (e)(3)(ii) and (e)(3)(iii) of this section.

(v) *Content and submittal dates for excess emissions and monitoring system performance reports.* All excess emissions and monitoring system performance reports and all summary reports, if required, shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. Written reports of excess emissions or exceedances of process or control system parameters shall include all the information required in paragraphs (c)(5) through (c)(13) of this section, in §§ 63.8(c)(7) and 63.8(c)(8), and in the relevant standard, and they shall contain the name, title, and signature of the responsible official who is certifying the accuracy of the report. When no excess emissions or exceedances of a parameter have occurred, or a CMS has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.

(vi) *Summary report.* As required under paragraphs (e)(3)(vii) and (e)(3)(viii) of this section, one summary report shall be submitted for the hazardous air pollutants monitored at each affected source (unless the relevant standard specifies that more than one summary report is required, e.g., one summary report for each hazardous air pollutant monitored). The summary report shall be entitled “Summary Report - Gaseous and Opacity Excess Emission and Continuous Monitoring System Performance” and shall contain the following information:

(A) The company name and address of the affected source;

(B) An identification of each hazardous air pollutant monitored at the affected source;

(C) The beginning and ending dates of the reporting period;

(D) A brief description of the process units;

(E) The emission and operating parameter limitations specified in the relevant standard(s);

(F) The monitoring equipment manufacturer(s) and model number(s);

(G) The date of the latest CMS certification or audit;

(H) The total operating time of the affected source during the reporting period;

(I) An emission data summary (or similar summary if the owner or operator monitors control system parameters), including the total duration of excess emissions during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to startup/shutdown, control equipment problems, process problems, other known causes, and other unknown causes;

(J) A CMS performance summary (or similar summary if the owner or operator monitors control system parameters), including the total CMS downtime during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of CMS downtime expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total CMS downtime during the reporting period into periods that are due to monitoring equipment malfunctions, nonmonitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes;

(K) A description of any changes in CMS, processes, or controls since the last reporting period;

(L) The name, title, and signature of the responsible official who is certifying the accuracy of the report; and

(M) The date of the report.

(vii) If the total duration of excess emissions or process or control system parameter exceedances for the reporting period is less than 1 percent of the total operating time for the reporting period, and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report shall be submitted, and the full excess emissions and continuous monitoring system performance report need not be submitted unless required by the Administrator.

(viii) If the total duration of excess emissions or process or control system parameter exceedances for the reporting period is 1 percent or greater of the total operating time for the reporting period, or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, both the summary report and the excess emissions and continuous monitoring system performance report shall be submitted.

(4) *Reporting continuous opacity monitoring system data produced during a performance test.* The owner or operator of an affected source required to use a COMS shall record the monitoring data produced during a performance test required under § 63.7 and shall furnish the Administrator a written report of the monitoring results. The report of COMS data shall be submitted simultaneously with the report of the performance test results required in paragraph (d)(2) of this section.

(f) *Waiver of recordkeeping or reporting requirements.*

(1) Until a waiver of a recordkeeping or reporting requirement has been granted by the Administrator under this paragraph, the owner or operator of an affected source remains subject to the requirements of this section.

(2) Recordkeeping or reporting requirements may be waived upon written application to the Administrator if, in the Administrator's judgment, the affected source is achieving the relevant standard(s), or the source is operating under an extension of compliance, or the owner or operator has requested an extension of compliance and the Administrator is still considering that request.

(3) If an application for a waiver of recordkeeping or reporting is made, the application shall accompany the request for an extension of compliance under § 63.6(i), any required compliance progress report or compliance status report required under this part (such as under §§ 63.6(i) and 63.9(h)) or in the source's title V permit, or an excess emissions and continuous monitoring system performance report required under paragraph (e) of this section, whichever is applicable. The application shall include whatever information the owner or operator considers useful to convince the Administrator that a waiver of recordkeeping or reporting is warranted.

(4) The Administrator will approve or deny a request for a waiver of recordkeeping or reporting requirements under this paragraph when he/she -

(i) Approves or denies an extension of compliance; or

(ii) Makes a determination of compliance following the submission of a required compliance status report or excess emissions and continuous monitoring systems performance report; or

(iii) Makes a determination of suitable progress towards compliance following the submission of a compliance progress report, whichever is applicable.

(5) A waiver of any recordkeeping or reporting requirement granted under this paragraph may be conditioned on other recordkeeping or reporting requirements deemed necessary by the Administrator.

(6) Approval of any waiver granted under this section shall not abrogate the Administrator's authority under the Act or in any way prohibit the Administrator from later canceling the waiver. The cancellation will be made only after notice is given to the owner or operator of the affected source.

§ 63.11 Control device and work practice requirements.

(a) *Applicability.*

(1) The applicability of this section is set out in § 63.1(a)(4).

(2) This section contains requirements for control devices used to comply with applicable subparts of this part. The requirements are placed here for administrative convenience and apply only to facilities covered by subparts referring to this section.

(3) This section also contains requirements for an alternative work practice used to identify leaking equipment. This alternative work practice is placed here for administrative convenience and is available to all subparts in 40 CFR parts 60, 61, 63, and 65 that require monitoring of equipment with a 40 CFR part 60, appendix A-7, Method 21 monitor.

(b) *Flares.*

(1) Owners or operators using flares to comply with the provisions of this part shall monitor these control devices to assure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators using flares shall monitor these control devices.

(2) Flares shall be steam-assisted, air-assisted, or non-assisted.

(3) Flares shall be operated at all times when emissions may be vented to them.

(4) Flares shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. Test Method 22 in appendix A of part 60 of this chapter shall be used to determine the compliance of flares with the visible emission provisions of this part. The observation period is 2 hours and shall be used according to Method 22.

(5) Flares shall be operated with a flame present at all times. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

(6) An owner/operator has the choice of adhering to the heat content specifications in paragraph (b)(6)(ii) of this section, and the maximum tip velocity specifications in paragraph (b)(7) or (b)(8) of this section, or adhering to the requirements in paragraph (b)(6)(i) of this section.

(i) (A) Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0 percent (by volume) or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity V_{max}, as determined by the following equation:

$V_{max} = (X_{H2} - K_1) * K_2$

Where:

V_{max} = Maximum permitted velocity, m/sec.

K_1 = Constant, 6.0 volume-percent hydrogen.

K_2 = Constant, 3.9(m/sec)/volume-percent hydrogen.

X_{H2} = The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946-77. (Incorporated by reference as specified in § 63.14).

(B) The actual exit velocity of a flare shall be determined by the method specified in paragraph (b)(7)(i) of this section.

(ii) Flares shall be used only with the net heating value of the gas being combusted at 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted at 7.45 M/scm (200 Btu/scf) or greater if the flares is non-assisted. The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \sum_{i=1}^{n} C_i H_i$$

Where:

H_T = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C.

K = Constant =

$$1.740 \times 10^{-7} \left(\frac{1}{\text{ppmv}} \right) \left(\frac{\text{g-mole}}{\text{scm}} \right) \left(\frac{\text{MJ}}{\text{kcal}} \right)$$

where the standard temperature for (g-mole/scm) is 20 °C.

C_i = Concentration of sample component i in ppmv on a wet basis, as measured for organics by Test Method 18 and measured for hydrogen and carbon monoxide by American Society for Testing and Materials (ASTM) D1946-77 or 90 (Reapproved 1994) (incorporated by reference as specified in § 63.14).

H_i = Net heat of combustion of sample component i, kcal/g-mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in § 63.14) if published values are not available or cannot be calculated.

n = Number of sample components.

(7) (i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (b)(7)(ii) and (b)(7)(iii) of this section. The actual exit velocity of a flare shall be determined by dividing by the volumetric flow rate of gas being combusted (in units of emission standard temperature and pressure), as determined by Test Method 2, 2A, 2C, or 2D in appendix A to 40 CFR part 60 of this chapter, as appropriate, by the unobstructed (free) cross-sectional area of the flare tip.

(ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in paragraph (b)(7)(i) of this section, equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec), are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

(iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in paragraph (b)(7)(i) of this section, less than the velocity V_{max}, as determined by the method specified in this paragraph, but less than 122 m/sec (400 ft/sec) are allowed. The maximum permitted velocity, V_{max}, for flares complying with this paragraph shall be determined by the following equation:

$Log_{10}(V_{max}) = (H_T + 28.8)/31.7$

Where:

V_{max} = Maximum permitted velocity, m/sec.

28.8 = Constant.

31.7 = Constant.

H_T = The net heating value as determined in paragraph (b)(6) of this section.

(8) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity V_{max}. The maximum permitted velocity, V_{max}, for air-assisted flares shall be determined by the following equation:

$V_{max} = 8.71 + 0.708(H_T)$

Where:

V_{max} = Maximum permitted velocity, m/sec.

8.71 = Constant.

0.708 = Constant.

H_T = The net heating value as determined in paragraph (b)(6)(ii) of this section.

(c) *Alternative work practice for monitoring equipment for leaks.* Paragraphs (c), (d), and (e) of this section apply to all equipment for which the applicable subpart requires monitoring with a 40 CFR part 60, appendix A-7, Method 21 monitor, except for closed vent systems, equipment designated as leakless, and equipment identified in the applicable subpart as having no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background. An owner or operator may use an optical gas imaging instrument instead of a 40 CFR part 60, sppendix A-7, Method 21 monitor. Requirements in the existing subparts that are specific to the Method 21 instrument do not apply under this section. All other requirements in the applicable subpart that are not addressed in paragraphs (c), (d), and (e) of this section continue to apply. For example, equipment specification requirements, and non-Method 21 instrument recordkeeping and reporting requirements in the applicable subpart continue to apply. The terms defined in paragraphs (c)(1) through (5) of this section have meanings that are specific to the alternative work practice standard in paragraphs (c), (d), and (e) of this section.

(1) *Applicable subpart* means the subpart in 40 CFR parts 60, 61, 63, and 65 that requires monitoring of equipment with a 40 CFR part 60, appendix A-7, Method 21 monitor.

(2) *Equipment* means pumps, valves, pressure relief valves, compressors, open-ended lines, flanges, connectors, and other equipment covered by the applicable subpart that require monitoring with a 40 CFR part 60, appendix A-7, Method 21 monitor.

(3) *Imaging* means making visible emissions that may otherwise be invisible to the naked eye.

(4) *Optical gas imaging instrument* means an instrument that makes visible emissions that may otherwise be invisible to the naked eye.

(5) *Repair* means that equipment is adjusted, or otherwise altered, in order to eliminate a leak.

(6) *Leak* means:

(i) Any emissions imaged by the optical gas instrument;

(ii) Indications of liquids dripping;

(iii) Indications by a sensor that a seal or barrier fluid system has failed; or

(iv) Screening results using a 40 CFR part 60, appendix A-7, Method 21 monitor that exceed the leak definition in the applicable subpart to which the equipment is subject.

(d) The alternative work practice standard for monitoring equipment for leaks is available to all subparts in 40 CFR parts 60, 61, 63, and 65 that require monitoring of equipment with a 40 CFR part 60, appendix A-7, Method 21 monitor.

(1) An owner or operator of an affected source subject to 40 CFR parts 60, 61, 63, or 65 can choose to comply with the alternative work practice requirements in paragraph (e) of this section instead of using the 40 CFR part 60, appendix A-7, Method 21 monitor to identify leaking equipment. The owner or operator must document the equipment, process units, and facilities for which the alternative work practice will be used to identify leaks.

(2) Any leak detected when following the leak survey procedure in paragraph (e)(3) of this section must be identified for repair as required in the applicable subpart.

(3) If the alternative work practice is used to identify leaks, re-screening after an attempted repair of leaking equipment must be conducted using either the alternative work practice or the 40 CFR part 60, Appendix A-7, Method 21 monitor at the leak definition required in the applicable subparts to which the equipment is subject.

(4) The schedule for repair is as required in the applicable subpart.

(5) When this alternative work practice is used for detecting leaking equipment, choose one of the monitoring frequencies listed in Table 1 to subpart A of this part in lieu of the monitoring frequency specified for regulated equipment in the applicable subpart. Reduced monitoring frequencies for good performance are not applicable when using the alternative work practice.

(6) When this alternative work practice is used for detecting leaking equipment, the following are not applicable for the equipment being monitored:

(i) Skip period leak detection and repair;

(ii) Quality improvement plans; or

(iii) Complying with standards for allowable percentage of valves and pumps to leak.

(7) When the alternative work practice is used to detect leaking equipment, the regulated equipment in paragraph (d)(1)(i) of this section must also be monitored annually using a 40 CFR part 60, Appendix A-7, Method 21 monitor at the leak definition required in the applicable subpart. The owner or operator may choose the specific monitoring period (for example, first quarter) to conduct the annual monitoring. Subsequent monitoring must be conducted every 12 months from the initial period. Owners or operators must keep records of the annual Method 21 screening results, as specified in paragraph (i)(4)(vii) of this section.

(e) An owner or operator of an affected source who chooses to use the alternative work practice must comply with the requirements of paragraphs (e)(1) through (e)(5) of this section.

(1) *Instrument specifications.* The optical gas imaging instrument must comply with the requirements specified in paragraphs (e)(1)(i) and (e)(1)(ii) of this section.

(i) Provide the operator with an image of the potential leak points for each piece of equipment at both the detection sensitivity level and within the distance used in the daily instrument check described in paragraph (e)(2) of this section. The detection sensitivity level depends upon the frequency at which leak monitoring is to be performed.

(ii) Provide a date and time stamp for video records of every monitoring event.

(2) *Daily instrument check.* On a daily basis, and prior to beginning any leak monitoring work, test the optical gas imaging instrument at the mass flow rate determined in paragraph (e)(2)(i) of this section in accordance with the procedure specified in paragraphs (e)(2)(ii) through (e)(2)(iv) of this section for each camera configuration used during monitoring (for example, different lenses used), unless an alternative method to demonstrate daily instrument checks has been approved in accordance with paragraph (e)(2)(v) of this section.

(i) Calculate the mass flow rate to be used in the daily instrument check by following the procedures in paragraphs (e)(2)(i)(A) and (e)(2)(i)(B) of this section.

(A) For a specified population of equipment to be imaged by the instrument, determine the piece of equipment in contact with the lowest mass fraction of chemicals that are detectable, within the distance to be used in paragraph (e)(2)(iv)(B) of this section, at or below the standard detection sensitivity level.

(B) Multiply the standard detection sensitivity level, corresponding to the selected monitoring frequency in Table 1 of subpart A of this part, by the mass fraction of detectable chemicals from the stream identified in paragraph (e)(2)(i)(A) of this section to determine the mass flow rate to be used in the daily instrument check, using the following equation.

$$E_{dic} = (E_{sds}) \sum_{i=1}^{k} x_i$$

Where:

E_{dic} = Mass flow rate for the daily instrument check, grams per hour

x_i = Mass fraction of detectable chemical(s) i seen by the optical gas imaging instrument, within the distance to be used in paragraph (e)(2)(iv)(B) of this section, at or below the standard detection sensitivity level, E_{sds}.

E_{sds} = Standard detection sensitivity level from Table 1 to subpart A, grams per hour

k = Total number of detectable chemicals emitted from the leaking equipment and seen by the optical gas imaging instrument.

(ii) Start the optical gas imaging instrument according to the manufacturer's instructions, ensuring that all appropriate settings conform to the manufacturer's instructions.

(iii) Use any gas chosen by the user that can be viewed by the optical gas imaging instrument and that has a purity of no less than 98 percent.

(iv) Establish a mass flow rate by using the following procedures:

(A) Provide a source of gas where it will be in the field of view of the optical gas imaging instrument.

(B) Set up the optical gas imaging instrument at a recorded distance from the outlet or leak orifice of the flow meter that will not be exceeded in the actual performance of the leak survey. Do not exceed the operating parameters of the flow meter.

(C) Open the valve on the flow meter to set a flow rate that will create a mass emission rate equal to the mass rate calculated in paragraph (e)(2)(i) of this section while observing the gas flow through the optical gas imaging instrument viewfinder. When an image of the gas emission is seen through the viewfinder at the required emission rate, make a record of the reading on the flow meter.

(v) Repeat the procedures specified in paragraphs (e)(2)(ii) through (e)(2)(iv) of this section for each configuration of the optical gas imaging instrument used during the leak survey.

(vi) To use an alternative method to demonstrate daily instrument checks, apply to the Administrator for approval of the alternative under § 63.177 or § 63.178, whichever is applicable.

(3) *Leak survey procedure.* Operate the optical gas imaging instrument to image every regulated piece of equipment selected for this work practice in accordance with the instrument manufacturer's operating parameters. All emissions imaged by the optical gas imaging instrument are considered to be leaks and are subject to repair. All emissions visible to the naked eye are also considered to be leaks and are subject to repair.

(4) *Recordkeeping.* Keep the records described in paragraphs (e)(4)(i) through (e)(4)(vii) of this section:

(i) The equipment, processes, and facilities for which the owner or operator chooses to use the alternative work practice.

(ii) The detection sensitivity level selected from Table 1 to subpart A of this part for the optical gas imaging instrument.

(iii) The analysis to determine the piece of equipment in contact with the lowest mass fraction of chemicals that are detectable, as specified in paragraph (e)(2)(i)(A) of this section.

(iv) The technical basis for the mass fraction of detectable chemicals used in the equation in paragraph (e)(2)(i)(B) of this section.

(v) The daily instrument check. Record the distance, per paragraph (e)(2)(iv)(B) of this section, and the flow meter reading, per paragraph (e)(2)(iv)(C) of this section, at which the leak was imaged. Keep a video record of the daily instrument check for each configuration of the optical gas imaging instrument used during the leak survey (for example, the daily instrument check must be conducted for each lens used). The video record must include a time and date stamp for each daily instrument check. The video record must be kept for 5 years.

(vi) *Recordkeeping requirements in the applicable subpart.* A video record must be used to document the leak survey results. The video record must include a time and date stamp for each monitoring event. A video record can be used to meet the recordkeeping requirements of the

applicable subparts if each piece of regulated equipment selected for this work practice can be identified in the video record. The video record must be kept for 5 years.

(vii) The results of the annual Method 21 screening required in paragraph (h)(7) of this section. Records must be kept for all regulated equipment specified in paragraph (h)(1) of this section. Records must identify the equipment screened, the screening value measured by Method 21, the time and date of the screening, and calibration information required in the existing applicable subparts.

(5) *Reporting.* Submit the reports required in the applicable subpart. Submit the records of the annual Method 21 screening required in paragraph (h)(7) of this section to the Administrator via e-mail to *CCG-AWP@EPA.GOV.*

§ 63.12 State authority and delegations.

(a) The provisions of this part shall not be construed in any manner to preclude any State or political subdivision thereof from -

(1) Adopting and enforcing any standard, limitation, prohibition, or other regulation applicable to an affected source subject to the requirements of this part, provided that such standard, limitation, prohibition, or regulation is not less stringent than any requirement applicable to such source established under this part;

(2) Requiring the owner or operator of an affected source to obtain permits, licenses, or approvals prior to initiating construction, reconstruction, modification, or operation of such source; or

(3) Requiring emission reductions in excess of those specified in subpart D of this part as a condition for granting the extension of compliance authorized by section 112(i)(5) of the Act.

(b) (1) Section 112(l) of the Act directs the Administrator to delegate to each State, when appropriate, the authority to implement and enforce standards and other requirements pursuant to section 112 for stationary sources located in that State. Because of the unique nature of radioactive material, delegation of authority to implement and enforce standards that control radionuclides may require separate approval.

(2) Subpart E of this part establishes procedures consistent with section 112(l) for the approval of State rules or programs to implement and enforce applicable Federal rules promulgated under the authority of section 112. Subpart E also establishes procedures for the review and withdrawal of section 112 implementation and enforcement authorities granted through a section 112(l) approval.

(c) All information required to be submitted to the EPA under this part also shall be submitted to the appropriate state agency of any state to which authority has been delegated under section 112(l) of the Act, provided that each specific delegation may exempt sources from a certain federal or state reporting requirement. Any information required to be submitted electronically by this part via the EPA's CEDRI may, at the discretion of the delegated authority, satisfy the requirements of this paragraph. The Administrator may permit all or some of the information to be submitted to the appropriate state agency only, instead of to the EPA and the state agency with the exception of federal electronic reporting requirements under this part. Sources may not be exempted from federal electronic reporting requirements.

§ 63.13 Addresses of State air pollution control agencies and EPA Regional Offices.

(a) All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this part shall be submitted to the appropriate Regional Office of the U.S. Environmental Protection Agency indicated in the following list of EPA Regional offices. If a request, report, application, submittal, or other communication is required by this part to be submitted electronically via the EPA's CEDRI then such submission satisfies the requirements of this paragraph (a).

EPA Region I (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont) Director, Enforcement and Compliance Assurance Division, U.S. EPA Region I, 5 Post Office Square - Suite 100 (04-2), Boston, MA 02109-3912, Attn: Air Compliance Clerk.

EPA Region II (New Jersey, New York, Puerto Rico, Virgin Islands), Director, Air and Waste Management Division, 26 Federal Plaza, New York, NY 10278.

EPA Region III (Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia), Director, Air Protection Division, 1650 Arch Street, Philadelphia, PA 19103.

EPA Region IV (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee). Director, Air, Pesticides and Toxics Management Division, Atlanta Federal Center, 61 Forsyth Street, Atlanta, GA 30303-3104.

EPA Region V (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin), Director, Air and Radiation Division, 77 West Jackson Blvd., Chicago, IL 60604-3507.

EPA Region VI (Arkansas, Louisiana, New Mexico, Oklahoma, Texas); Director; Enforcement and Compliance Assurance Division; U.S. Environmental Protection Agency, 1201 Elm Street, Suite 500, Mail Code 6ECD, Dallas, Texas 75270-2102.

EPA Region VII (Iowa, Kansas, Missouri, Nebraska), Director, Air and Waste Management Division, 11201 Renner Boulevard, Lenexa, Kansas 66219.

EPA Region VIII (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming) Director, Air and Toxics Technical Enforcement Program, Office of Enforcement, Compliance and Environmental Justice, Mail Code 8ENF-AT, 1595 Wynkoop Street, Denver, CO 80202-1129.

EPA Region IX (Arizona, California, Hawaii, Nevada; the territories of American Samoa and Guam; the Commonwealth of the Northern Mariana Islands; the territories of Baker Island, Howland Island, Jarvis Island, Johnston Atoll, Kingman Reef, Midway Atoll, Palmyra Atoll, and Wake Islands; and certain U.S. Government activities in the freely associated states of the Republic of the Marshall Islands, the Federated States of Micronesia, and the Republic of Palau), Director, Air Division, 75 Hawthorne Street, San Francisco, CA 94105.

EPA Region X (Alaska, Idaho, Oregon, Washington), Director, Office of Air Quality, 1200 Sixth Avenue (OAQ-107), Seattle, WA 98101.

(b) All information required to be submitted to the Administrator under this part also shall be submitted to the appropriate State agency of any State to which authority has been delegated under section 112(l) of the Act. The owner or operator of an affected source may contact the appropriate EPA Regional Office for the mailing addresses for those States whose delegation requests have been approved.

(c) If any State requires a submittal that contains all the information required in an application, notification, request, report, statement, or other communication required in this part, an owner or operator may send the appropriate Regional Office of the EPA a copy of that submittal to satisfy the requirements of this part for that communication.

§ 63.14 Incorporations by reference.

(a) The materials listed in this section are incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, a document must be published in the Federal Register and the material must be available to the public. All approved materials are available for inspection at the Air and Radiation Docket and Information Center (Air Docket) in the EPA Docket Center (EPA/DC) at Rm. 3334, EPA West Bldg., 1301 Constitution Ave. NW, Washington, DC. The EPA/DC Public Reading Room hours of operation are 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number of the EPA/DC Public

Reading Room is (202) 566–1744, and the telephone number for the Air Docket is (202) 566–1742. These approved materials are also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fedreg.legal@nara.gov or go to www.archives.gov/federal-register/cfr/ibr-locations.html. In addition, these materials are available from the following sources:

(b) American Conference of Governmental Industrial Hygienists (ACGIH), Customer Service Department, 1330 Kemper Meadow Drive, Cincinnati, Ohio 45240, telephone number (513) 742–2020.

(1) Industrial Ventilation: A Manual of Recommended Practice, 22nd Edition, 1995, Chapter 3, "Local Exhaust Hoods" and Chapter 5, "Exhaust System Design Procedure." IBR approved for §§ 63.843(b) and 63.844(b).

(2) Industrial Ventilation: A Manual of Recommended Practice, 23rd Edition, 1998, Chapter 3, "Local Exhaust Hoods" and Chapter 5, "Exhaust System Design Procedure." IBR approved for §§ 63.1503, 63.1506(c), 63.1512(e), Table 2 to subpart RRR, Table 3 to subpart RRR, and appendix A to subpart RRR, and § 63.2984(e).

(3) Industrial Ventilation: A Manual of Recommended Practice for Design, 27th Edition, 2010. IBR approved for §§ 63.1503, 63.1506(c), 63.1512(e), Table 2 to subpart RRR, Table 3 to subpart RRR, and appendix A to subpart RRR, and § 63.2984(e).

(c) American Petroleum Institute (API), 1220 L Street NW., Washington, DC 20005.

(1) API Publication 2517, Evaporative Loss from External Floating-Roof Tanks, Third Edition, February 1989, IBR approved for §§ 63.111, 63.1402, 63.2406 and 63.7944.

Note 1 to paragraph (c)(1):

API Publication 2517 available through reseller HIS Markit at https://global.ihs.com/

(2) API Publication 2518, Evaporative Loss from Fixed-roof Tanks, Second Edition, October 1991, IBR approved for § 63.150(g).

(3) API Manual of Petroleum Measurement Specifications (MPMS) Chapter 19.2 (API MPMS 19.2), Evaporative Loss From Floating-Roof Tanks, First Edition, April 1997, IBR approved for §§ 63.1251 and 63.12005.

(d) American Public Health Association, 1015 18th Street NW, Washington, DC 20036; phone (844) 232–3707; email: standardmethods@subscritpionoffice.com; website: www.standardmethods.org.

(1) Standard Method 5210, Biochemical Oxygen Demand (BOD), revised December 10, 2019; IBR approved for § 63.457(c)

(2) [Reserved]

(e) American Society of Heating, Refrigerating, and Air-Conditioning Engineers at 1791 Tullie Circle, NE., Atlanta, GA 30329 orders@ashrae.org.

(1) American Society of Heating, Refrigerating, and Air-Conditioning Engineers Method 52.1, *Gravimetric and Dust-Spot Procedures for Testing Air-Cleaning Devices Used in General Ventilation for Removing Particulate Matter* June 4, 1992; IBR approved for § 63.11516(d).

(2) ANSI/ASHRAE Standard 52.2–2017, *Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size,* copyright 2017; IBR approved for § 63.11173(e).

(f) American Society of Mechanical Engineers (ASME), Three Park Avenue, New York, NY 10016–5990, Telephone (800) 843–2763, http://www.asme.org; also available from HIS, Incorporated, 15 Inverness Way East, Englewood, CO 80112, Telephone (877) 413–5184, http://global.ihs.com.

(1) ANSI/ASME PTC 19.10–1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus], issued August 31, 1981, IBR approved for §§ 63.309(k), 63.457(k), 63.772(e) and (h), 63.865(b), 63.997(e), 63.1282(d) and (g), and 63.1625(b), table 5 to subpart EEEE, §§ 63.3166(a), 63.3360(e), 63.3545(a), 63.3555(a), 63.4166(a), 63.4362(a), 63.4766(a), 63.4965(a), and 63.5160(d), table 4 to subpart UUUU, table 3 to subpart YYYY, §§ 63.7822(b), 63.7824(e), 63.7825(b), 63.8000(d), 63.9307(c), 63.9323(a), 63.9621(b) and (c), 63.11148(e), 63.11155(e), 63.11162(f), 63.11163(g), 63.11410(j), 63.11551(a), 63.11646(a), and 63.11945, and table 4 to subpart AAAAA, table 5 to subpart DDDDD, table 4 to subpart JJJJJ, table 4 to subpart KKKKK, table 4 to subpart SSSSS, tables 4 and 5 of subpart UUUUU, table 1 to subpart ZZZZZ, and table 4 to subpart JJJJJJ.

(2) [Reserved]

(g) The Association of Florida Phosphate Chemists, P.O. Box 1645, Bartow, Florida 33830.

(1) Book of Methods Used and Adopted By The Association of Florida Phosphate Chemists, Seventh Edition 1991:

(i) Section IX, Methods of Analysis for Phosphate Rock, No. 1 Preparation of Sample, IBR approved for § 63.606(f), § 63.626(f).

(ii) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus-P_2O_5 or $Ca_3(PO_4)_2$, Method A—Volumetric Method, IBR approved for § 63.606(f), § 63.626(f).

(iii) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus-P_2O_5 or $Ca_3(PO_4)_2$, Method B—Gravimetric Quimociac Method, IBR approved for § 63.606(f), § 63.626(f).

(iv) Section IX, Methods of Analysis For Phosphate Rock, No. 3 Phosphorus-P_2O_5 or $Ca_3(PO_4)_2$, Method C—Spectrophotometric Method, IBR approved for § 63.606(f), § 63.626(f).

(v) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P_2O_5, Method A—Volumetric Method, IBR approved for § 63.606(f), § 63.626(f), and (g).

(vi) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P_2O_5, Method B—Gravimetric Quimociac Method, IBR approved for § 63.606(f), § 63.626(f), and (g).

(vii) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P_2O_5, Method C—Spectrophotometric Method, IBR approved for § 63.606(f), § 63.626(f), and (g).

(2) [Reserved]

(h) Association of Official Analytical Chemists (AOAC) International, Customer Services, Suite 400, 2200 Wilson Boulevard, Arlington, Virginia 22201–3301, Telephone (703) 522–3032, Fax (703) 522–5468.

(1) AOAC Official Method 929.01 Sampling of Solid Fertilizers, Sixteenth edition, 1995, IBR approved for § 63.626(g).

(2) AOAC Official Method 929.02 Preparation of Fertilizer Sample, Sixteenth edition, 1995, IBR approved for § 63.626(g).

(3) AOAC Official Method 957.02 Phosphorus (Total) in Fertilizers, Preparation of Sample Solution, Sixteenth edition, 1995, IBR approved for § 63.626(g).

(4) AOAC Official Method 958.01 Phosphorus (Total) in Fertilizers, Spectrophotometric Molybdovanadophosphate Method, Sixteenth edition, 1995, IBR approved for § 63.626(g).

(5) AOAC Official Method 962.02 Phosphorus (Total) in Fertilizers, Gravimetric Quinolinium Molybdophosphate Method, Sixteenth edition, 1995, IBR approved for § 63.626(g).

(6) AOAC Official Method 969.02 Phosphorus (Total) in Fertilizers, Alkalimetric Quinolinium Molybdophosphate Method, Sixteenth edition, 1995, IBR approved for § 63.626(g).

(7) AOAC Official Method 978.01 Phosphorus (Total) in Fertilizers, Automated Method, Sixteenth edition, 1995, IBR approved for § 63.626(g).

(i) ASTM International, 100 Barr Harbor Drive, Post Office Box C700, West Conshohocken, PA 19428–2959, Telephone (610) 832–9585, http://www.astm.org*;* also available from ProQuest, 789 East Eisenhower Parkway, Ann Arbor, MI 48106–1346, Telephone (734) 761–4700, http://www.proquest.com*.*

(1) ASTM D95–05 (Reapproved 2010), Standard Test Method for Water in Petroleum Products and Bituminous Materials by Distillation, approved May 1, 2010, IBR approved for § 63.10005(i) and table 6 to subpart DDDDD.

(2) ASTM D240–09 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, approved July 1, 2009, IBR approved for table 6 to subpart DDDDD.

(3) ASTM Method D388–05, Standard Classification of Coals by Rank, approved September 15, 2005, IBR approved for §§ 63.7575, 63.10042, and 63.11237.

(4) ASTM Method D396–10, Standard Specification for Fuel Oils, including Appendix X1, approved October 1, 2010, IBR approved for § 63.10042.

(5) ASTM D396–10, Standard Specification for Fuel Oils, approved October 1, 2010, IBR approved for §§ 63.7575 and 63.11237.

(6) ASTM D523–89, Standard Test Method for Specular Gloss, IBR approved for § 63.782.

(7) ASTM D975–11b, Standard Specification for Diesel Fuel Oils, approved December 1, 2011, IBR approved for § 63.7575.

(8) ASTM D1193–77, Standard Specification for Reagent Water, IBR approved for appendix A to part 63: Method 306, Sections 7.1.1 and 7.4.2.

(9) ASTM D1193–91, Standard Specification for Reagent Water, IBR approved for appendix A to part 63: Method 306, Sections 7.1.1 and 7.4.2.

(10) ASTM D1331–89, Standard Test Methods for Surface and Interfacial Tension of Solutions of Surface Active Agents, IBR approved for appendix A to part 63: Method 306B, Sections 6.2, 11.1, and 12.2.2.

(11) ASTM D1475–90, Standard Test Method for Density of Paint, Varnish Lacquer, and Related Products, IBR approved for appendix A to subpart II.

(12) ASTM D1475–13, Standard Test Method for Density of Liquid Coatings, Inks, and Related Products, approved November 1, 2013, IBR approved for §§ 63.3151(b), 63.3941(b) and (c), 63.3951(c), 63.4141(b) and (c), 63.4551(c), 63.4741(b) and (c), 63.4751(c), and 63.4941(b) and (c).

(13) ASTM Method D1835–05, Standard Specification for Liquefied Petroleum (LP) Gases, approved April 1, 2005, IBR approved for §§ 63.7575 and 63.11237.

(14) ASTM D1945–03 (Reapproved 2010), Standard Test Method for Analysis of Natural Gas by Gas Chromatography, Approved January 1, 2010, IBR approved for §§ 63.670(j), 63.772(h), and 63.1282(g).

(15) ASTM D1945–14, Standard Test Method for Analysis of Natural Gas by Gas Chromatography, Approved November 1, 2014, IBR approved for § 63.670(j).

(16) ASTM D1946–77, Standard Method for Analysis of Reformed Gas by Gas Chromatography, IBR approved for § 63.11(b).

(17) ASTM D1946–90 (Reapproved 1994), Standard Method for Analysis of Reformed Gas by Gas Chromatography, 1994, IBR approved for §§ 63.11(b), 63.987(b), and 63.1412.

(18) ASTM D1963–85 (Reapproved 1996), Standard Test Method for Specific Gravity of Drying Oils, Varnishes, Resins, and Related Materials at 25/25 °C, approved November 29, 1985, IBR approved for § 63.3360(c).

(19) ASTM D2013/D2013M–09, Standard Practice for Preparing Coal Samples for Analysis, (Approved November 1, 2009), IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJJ.

(20) ASTM D2099–00, Standard Test Method for Dynamic Water Resistance of Shoe Upper Leather by the Maeser Water Penetration Tester, IBR approved for § 63.5350.

(21) ASTM D2111–10 (Reapproved 2015), Standard Test Methods for Specific Gravity and Density of Halogenated Organic Solvents and Their Admixtures, approved June 1, 2015, IBR approved for §§ 63.3360(c), 63.3951(c), 63.4141(b) and (c), 63.4551(c), and 63.4741(a).

(22) ASTM D2216–05, Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass, IBR approved for the definition of “Free organic liquids” in § 63.10692.

(23) ASTM D2234/D2234M–10, Standard Practice for Collection of a Gross Sample of Coal, approved January 1, 2010, IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJJ.

(24) ASTM D2369–93, Standard Test Method for Volatile Content of Coatings, IBR approved for appendix A to subpart II.

(25) ASTM D2369–95, Standard Test Method for Volatile Content of Coatings, IBR approved for appendix A to subpart II.

(26) ASTM D2369–10 (Reapproved 2015)e1, Standard Test Method for Volatile Content of Coatings, approved June 1, 2015, IBR approved for §§ 63.3151(a), 63.3360(c), 63.3961(j), 63.4141(a) and (b), 63.4161(h), 63.4321(e), 63.4341(e), 63.4351(d), 63.4541(a), and 63.4561(j), appendix A to subpart PPPP, and §§ 63.4741(a), 63.4941(a) and (b), 63.4961(j), and 63.8055(b).

(27) ASTM D2382–76, Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), IBR approved for § 63.11(b).

(28) ASTM D2382–88, Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), IBR approved for § 63.11(b).

(29) ASTM D2697–86 (Reapproved 1998), Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings, IBR approved for §§ 63.3521(b), and 63.5160(c).

(30) ASTM D2697–03 (Reapproved 2014), Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings, approved July 1, 2014, IBR approved for §§ 63.3161(f), 63.3360(c), 63.3941(b), 63.4141(b), 63.4741(a) and (b), 63.4941(b), and 63.8055(b).

(31) ASTM D2879–83, Standard Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, Approved November 28, 1983, IBR approved for §§ 63.111, 63.1402, 63.2406, 63.7944, and 63.12005.

(32) ASTM D2879–96, Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, (Approved 1996), IBR approved for §§ 63.111, and 63.12005.

(33) ASTM D2908–74, Standard Practice for Measuring Volatile Organic Matter in Water by Aqueous-Injection Gas Chromatography, Approved June 27, 1974, IBR approved for § 63.1329(c).

(34) ASTM D2908–91, Standard Practice for Measuring Volatile Organic Matter in Water by Aqueous-Injection Gas Chromatography, Approved December 15, 1991, IBR approved for § 63.1329(c).

(35) ASTM D2908–91(Reapproved 2001), Standard Practice for Measuring Volatile Organic Matter in Water by Aqueous-Injection Gas Chromatography, Approved December 15, 1991, IBR approved for § 63.1329(c).

(36) ASTM D2908–91(Reapproved 2005), Standard Practice for Measuring Volatile Organic Matter in Water by Aqueous-Injection Gas Chromatography, Approved December 1, 2005, IBR approved for § 63.1329(c).

(37) ASTM D2908–91(Reapproved 2011), Standard Practice for Measuring Volatile Organic Matter in Water by Aqueous-Injection Gas Chromatography, Approved May 1, 2011, IBR approved for § 63.1329(c).

(38) ASTM D2986–95A, "Standard Practice for Evaluation of Air Assay Media by the Monodisperse DOP (Dioctyl Phthalate) Smoke Test," approved September 10, 1995, IBR approved for section 7.1.1 of Method 315 in appendix A to this part.

(39) ASTM D3173–03 (Reapproved 2008), Standard Test Method for Moisture in the Analysis Sample of Coal and Coke, (Approved February 1, 2008), IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJJ.

(40) ASTM D3257–93, Standard Test Methods for Aromatics in Mineral Spirits by Gas Chromatography, IBR approved for § 63.786(b).

(41) ASTM D3370–76, Standard Practices for Sampling Water, Approved August 27, 1976, IBR approved for § 63.1329(c).

(42) ASTM D3370–95a, Standard Practices for Sampling Water from Closed Conduits, Approved September 10, 1995, IBR approved for § 63.1329(c).

(43) ASTM D3370–07, Standard Practices for Sampling Water from Closed Conduits, Approved December 1, 2007, IBR approved for § 63.1329(c).

(44) ASTM D3370–08, Standard Practices for Sampling Water from Closed Conduits, Approved October 1, 2008, IBR approved for § 63.1329(c).

(45) ASTM D3370–10, Standard Practices for Sampling Water from Closed Conduits, Approved December 1, 2010, IBR approved for § 63.1329(c).

(46) ASTM D3588–98 (Reapproved 2003), Standard Practice for Calculating Heat Value, Compressibility Factor, and Relative Density of Gaseous Fuels, (Approved May 10, 2003), IBR approved for §§ 63.772(h) and 63.1282(g).

(47) ASTM D3695–88, Standard Test Method for Volatile Alcohols in Water by Direct Aqueous-Injection Gas Chromatography, IBR approved for § 63.365(e).

(48) ASTM D3792–91, Standard Method for Water Content of Water-Reducible Paints by Direct Injection into a Gas Chromatograph, IBR approved for appendix A to subpart II.

(49) ASTM D3912–80, Standard Test Method for Chemical Resistance of Coatings Used in Light-Water Nuclear Power Plants, IBR approved for § 63.782.

(50) ASTM D3960–98, Standard Practice for Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings, approved November 10, 1998, IBR approved for §§ 63.3360(c) and 63.8055(b).

(51) ASTM D4006–11, Standard Test Method for Water in Crude Oil by Distillation, including Annex A1 and Appendix X1, (Approved June 1, 2011), IBR approved for § 63.10005(i) and table 6 to subpart DDDDD.

(52) ASTM D4017–81, Standard Test Method for Water in Paints and Paint Materials by the Karl Fischer Titration Method, IBR approved for appendix A to subpart II.

(53) ASTM D4017–90, Standard Test Method for Water in Paints and Paint Materials by the Karl Fischer Titration Method, IBR approved for appendix A to subpart II.

(54) ASTM D4017–96a, Standard Test Method for Water in Paints and Paint Materials by the Karl Fischer Titration Method, IBR approved for appendix A to subpart II.

(55) ASTM D4057–06 (Reapproved 2011), Standard Practice for Manual Sampling of Petroleum and Petroleum Products, including Annex A1, (Approved June 1, 2011), IBR approved for § 63.10005(i) and table 6 to subpart DDDDD.

(56) ASTM D4082–89, Standard Test Method for Effects of Gamma Radiation on Coatings for Use in Light-Water Nuclear Power Plants, IBR approved for § 63.782.

(57) ASTM D4084–07, Standard Test Method for Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method), (Approved June 1, 2007), IBR approved for table 6 to subpart DDDDD.

(58) ASTM D4177–95 (Reapproved 2010), Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, including Annexes A1 through A6 and Appendices X1 and X2, (Approved May 1, 2010), IBR approved for § 63.10005(i) and table 6 to subpart DDDDD.

(59) ASTM D4208–02 (Reapproved 2007), Standard Test Method for Total Chlorine in Coal by the Oxygen Bomb Combustion/Ion Selective Electrode Method, approved May 1, 2007, IBR approved for table 6 to subpart DDDDD.

(60) ASTM D4239–14e1, "Standard Test Method for Sulfur in the Analysis Sample of Coal and Coke Using High-Temperature Tube Furnace Combustion," approved March 1, 2014, IBR approved for § 63.849(f).

(61) ASTM D4256–89, Standard Test Method for Determination of the Decontaminability of Coatings Used in Light-Water Nuclear Power Plants, IBR approved for § 63.782.

(62) ASTM D4256–89 (Reapproved 94), Standard Test Method for Determination of the Decontaminability of Coatings Used in Light-Water Nuclear Power Plants, IBR approved for § 63.782.

(63) ASTM D4282–15, Standard Test Method for Determination of Free Cyanide in Water and Wastewater by Microdiffusion, Approved July 15, 2015, IBR approved for § 63.1103(g).

(64) ASTM D4606–03 (Reapproved 2007), Standard Test Method for Determination of Arsenic and Selenium in Coal by the Hydride Generation/Atomic Absorption Method, (Approved October 1, 2007), IBR approved for table 6 to subpart DDDDD.

(65) ASTM D4809–95, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method), IBR approved for § 63.11(b).

(66) ASTM D4840–99 (Reapproved 2018)e, Standard Guide for Sampling Chain-of-Custody Procedures, approved August 15, 2018, IBR approved for appendix A to part 63.

(67) ASTM D4891–89 (Reapproved 2006), Standard Test Method for Heating Value of Gases in Natural Gas Range by Stoichiometric Combustion, (Approved June 1, 2006), IBR approved for §§ 63.772(h) and 63.1282(g).

(68) ASTM D5066–91 (Reapproved 2017), Standard Test Method for Determination of the Transfer Efficiency Under Production Conditions for Spray Application of Automotive Paints-Weight Basis, approved June 1, 2017, IBR approved for § 63.3161(g).

(69) ASTM D5087–02, Standard Test Method for Determining Amount of Volatile Organic Compound (VOC) Released from Solventborne Automotive Coatings and Available for Removal in a VOC Control Device (Abatement), IBR approved for § 63.3165(e) and appendix A to subpart IIII.

(70) ASTM D5192–09, Standard Practice for Collection of Coal Samples from Core, (Approved June 1, 2009), IBR approved for table 6 to subpart DDDDD.

(71) ASTM D5198–09, Standard Practice for Nitric Acid Digestion of Solid Waste, (Approved February 1, 2009), IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJJ.

(72) ASTM D5228–92, Standard Test Method for Determination of Butane Working Capacity of Activated Carbon, (Reapproved 2005), IBR approved for § 63.11092(b).

(73) ASTM D5291–02, Standard Test Methods for Instrumental Determination of Carbon, Hydrogen, and Nitrogen in Petroleum Products and Lubricants, IBR approved for appendix A to subpart MMMM.

(74) ASTM D5790–95 (Reapproved 2012), Standard Test Method for Measurement of Purgeable Organic Compounds in Water by Capillary Column Gas Chromatography/Mass Spectrometry, Approved June 15, 2012, IBR approved for § 63.2485(h) and Table 4 to subpart UUUU.

(75) ASTM D5864–11, Standard Test Method for Determining Aerobic Aquatic Biodegradation of Lubricants or Their Components, (Approved March 1, 2011), IBR approved for table 6 to subpart DDDDD.

(76) ASTM D5865–10a, Standard Test Method for Gross Calorific Value of Coal and Coke, (Approved May 1, 2010), IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJJ.

(77) ASTM D5954–98 (Reapproved 2006), Test Method for Mercury Sampling and Measurement in Natural Gas by Atomic Absorption Spectroscopy, (Approved December 1, 2006), IBR approved for table 6 to subpart DDDDD.

(78) ASTM D5965–02 (Reapproved 2013), Standard Test Methods for Specific Gravity of Coating Powders, approved June 1, 2013, IBR approved for §§ 63.3151(b) and 63.3951(c).

(79) ASTM D6053–00, Standard Test Method for Determination of Volatile Organic Compound (VOC) Content of Electrical Insulating Varnishes, IBR approved for appendix A to subpart MMMM.

(80) ASTM D6093–97 (Reapproved 2003), Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer, IBR approved for §§ 63.3521 and 63.5160(c).

(81) ASTM D6093–97 (Reapproved 2016), Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer, approved December 1, 2016, IBR approved for §§ 63.3161(f), 63.3360(c), 63.3941(b), 63.4141(b), 63.4741(a) and (b), and 63.4941(b).

(82) ASTM D6196–03 (Reapproved 2009), Standard Practice for Selection of Sorbents, Sampling, and Thermal Desorption Analysis Procedures for Volatile Organic Compounds in Air, Approved March 1, 2009, IBR approved for appendix A to this part: Method 325A and Method 325B.

(83) ASTM D6266–00a (Reapproved 2017), Standard Test Method for Determining the Amount of Volatile Organic Compound (VOC) Released from Waterborne Automotive Coatings and Available for Removal in a VOC Control Device (Abatement), approved July 1, 2017, IBR approved for § 63.3165(e).

(84) ASTM D6323–98 (Reapproved 2003), Standard Guide for Laboratory Subsampling of Media Related to Waste Management Activities, (Approved August 10, 2003), IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJJ.

(85) ASTM D6348–03, Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, including Annexes A1 through A8, Approved October 1, 2003, IBR approved for §§ 63.457(b), 63.997(e), and 63.1349, table 4 to subpart DDDD, table 5 to subpart EEEE, table 4 to subpart UUUU, table 4 subpart ZZZZ, and table 8 to subpart HHHHHHH.

(86) ASTM D6348–03 (Reapproved 2010), Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, including Annexes A1 through

A8, Approved October 1, 2010, IBR approved for §§ 63.1571(a), 63.4751(i), 63.4752(e), 63.4766(b), 63.7142(a) and (b), tables 4 and 5 to subpart JJJJJ, tables 4 and 6 to subpart KKKKK, tables 1, 2, and 5 to subpart UUUUU and appendix B to subpart UUUUU.

(87) ASTM D6348–12e1, Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, Approved February 1, 2012, IBR approved for §§ 63.997(e), 63.1571(a), and 63.2354(b), table 5 to subpart EEEE, table 4 to subpart UUUU, §§ 63.7142(a) and (b) and 63.8000(d), and table 4 to subpart SSSSS.

(88) ASTM D6350–98 (Reapproved 2003), Standard Test Method for Mercury Sampling and Analysis in Natural Gas by Atomic Fluorescence Spectroscopy, (Approved May 10, 2003), IBR approved for table 6 to subpart DDDDD.

(89) ASTM D6357–11, Test Methods for Determination of Trace Elements in Coal, Coke, and Combustion Residues from Coal Utilization Processes by Inductively Coupled Plasma Atomic Emission Spectrometry, (Approved April 1, 2011), IBR approved for table 6 to subpart DDDDD.

(90) ASTM D6376–10, "Standard Test Method for Determination of Trace Metals in Petroleum Coke by Wavelength Dispersive X-Ray Fluorescence Spectroscopy," Approved July 1, 2010, IBR approved for § 63.849(f).

(91) [Reserved]

(92) ASTM D6420–99, Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry, IBR approved for §§ 63.5799 and 63.5850.

(93) ASTM D6420–99 (Reapproved 2004), Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry (Approved October 1, 2004), IBR approved for §§ 63.457(b), 63.772(a), 63.772(e), 63.1282(a) and (d), and table 8 to subpart HHHHHHH.

(94) ASTM D6420–99 (Reapproved 2010), Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry, Approved October 1, 2010, IBR approved for §§ 63.670(j), Table 4 to subpart UUUU, 63.7142(b), and appendix A to this part: Method 325B.

(95) ASTM D6420–18, Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry, approved November 1, 2018, IBR approved for §§ 63.987(b), 63.997(e), and 63.2354(b), table 5 to subpart EEEE, and §§ 63.2450(j) and 63.8000(d).

(96) ASTM D6522–00, Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers, IBR approved for § 63.9307(c).

(97) ASTM D6522–00 (Reapproved 2005), Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers, (Approved October 1, 2005), IBR approved for table 4 to subpart ZZZZ, table 5 to subpart DDDDDD, table 4 to subpart JJJJJJ, and §§ 63.772(e) and (h)) and 63.1282(d) and (g).

(98) ASTM D6522–11 Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers, Approved December 1, 2011, IBR approved for § 63.1961(a) and table 3 to subpart YYYY.

(99) ASTM D6721–01 (Reapproved 2006), Standard Test Method for Determination of Chlorine in Coal by Oxidative Hydrolysis Microcoulometry, (Approved April 1, 2006), IBR approved for table 6 to subpart DDDDD.

(100) ASTM D6722–01 (Reapproved 2006), Standard Test Method for Total Mercury in Coal and Coal Combustion Residues by the Direct Combustion Analysis, (Approved April 1, 2006), IBR approved for Table 6 to subpart DDDDD and Table 5 to subpart JJJJJJ.

(101) ASTM D6735–01 (Reapproved 2009), Standard Test Method for Measurement of Gaseous Chlorides and Fluorides from Mineral Calcining Exhaust Sources—Impinger Method, IBR approved for § 63.7142(b), tables 4 and 5 to subpart JJJJJ, and tables 4 and 6 to subpart KKKKK.

(102) ASTM D6751–11b, Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels, (Approved July 15, 2011), IBR approved for §§ 63.7575 and 63.11237.

(103) ASTM D6784–02 (Reapproved 2008), Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), Approved April 1, 2008; IBR approved for §§ 63.2465(d); 63.11646(a); 63.11647(a) and (d); tables 1, 2, 5, 11, 12t, and 13 to subpart DDDDD; tables 4 and 5 to subpart JJJJJ; tables 4 and 6 to subpart KKKKK; table 4 to subpart JJJJJJ.

(104) ASTM D6784–16, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), Approved March 1, 2016; IBR approved for table 5 to subpart UUUUU; appendix A to subpart UUUUU.

(105) ASTM D6883–04, Standard Practice for Manual Sampling of Stationary Coal from Railroad Cars, Barges, Trucks, or Stockpiles, (Approved June 1, 2004), IBR approved for table 6 to subpart DDDDD.

(106) ASTM D6886–18, Standard Test Method for Determination of the Weight Percent Individual Volatile Organic Compounds in Waterborne Air-Dry Coatings by Gas Chromatography, approved October 1, 2018, IBR approved for § 63.2354(c).

(107) ASTM D7237–18, Standard Test Method for Free Cyanide and Aquatic Free Cyanide with Flow Injection Analysis (FIA) Utilizing Gas Diffusion Separation and Amperometric Detection, Approved December 1, 2018, IBR approved for § 63.1103(g).

(108) ASTM D7430–11ae1, Standard Practice for Mechanical Sampling of Coal, (Approved October 1, 2011), IBR approved for table 6 to subpart DDDDD.

(109) ASTM D7520–16, Standard Test Method for Determining the Opacity of a Plume in the Outdoor Ambient Atmosphere, approved April 1, 2016; IBR approved for §§ 63.1625(b); table 3 to subpart LLLLL; 63.7823(c) through (e), 63.7833(g); 63.11423(c).

(110) [Reserved]

(111) ASTM E145–94 (Reapproved 2001), Standard Specification for Gravity-Convection and Forced-Ventilation Ovens, IBR approved for appendix A to subpart PPPP.

(112) ASTM E180–93, Standard Practice for Determining the Precision of ASTM Methods for Analysis and Testing of Industrial Chemicals, IBR approved for § 63.786(b).

(113) ASTM E260–91, General Practice for Packed Column Gas Chromatography, IBR approved for §§ 63.750(b) and 63.786(b).

(114) ASTM E260–96, General Practice for Packed Column Gas Chromatography, IBR approved for §§ 63.750(b) and 63.786(b).

(115) ASTM E515–95 (Reapproved 2000), Standard Test Method for Leaks Using Bubble Emission Techniques, IBR approved for § 63.425(i).

(116) ASTM E711–87 (Reapproved 2004), Standard Test Method for Gross Calorific Value of Refuse-Derived Fuel by the Bomb Calorimeter, (Approved August 28, 1987), IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJJ.

(117) ASTM E776–87 (Reapproved 2009), Standard Test Method for Forms of Chlorine in Refuse-Derived Fuel, (Approved July 1, 2009), IBR approved for table 6 to subpart DDDDD.

(118) ASTM E871–82 (Reapproved 2006), Standard Test Method for Moisture Analysis of Particulate Wood Fuels, (Approved November 1, 2006), IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJJ.

(119) ASTM UOP539–12, Refinery Gas Analysis by GC, Copyright 2012 (to UOP), IBR approved for § 63.670(j).

(j) Bay Area Air Quality Management District (BAAQMD), 939 Ellis Street, San Francisco, California 94109, http://www.arb.ca.gov/DRDB/BA/CURHTML/ST/st30.pdf.

(1) "BAAQMD Source Test Procedure ST–30—Static Pressure Integrity Test, Underground Storage Tanks," adopted November 30, 1983, and amended December 21, 1994, IBR approved for § 63.11120(a).

(2) [Reserved]

(k) British Standards Institute, 389 Chiswick High Road, London W4 4AL, United Kingdom.

(1) BS EN 1593:1999, Non-destructive Testing: Leak Testing—Bubble Emission Techniques, IBR approved for § 63.425(i).

(2) BS EN 14662–4:2005, Ambient air quality standard method for the measurement of benzene concentrations—Part 4: Diffusive sampling followed by thermal desorption and gas chromatography, Published June 27, 2005, IBR approved for appendix A to this part: Method 325A and Method 325B.

(l) California Air Resources Board (CARB), 1001 I Street, P.O. Box 2815, Sacramento, CA 95812–2815, Telephone (916) 327–0900, http://www.arb.ca.gov/.

(1) Method 310, "Determination of Volatile Organic Compounds (VOC) in Consumer Products and Reactive Organic Compounds (ROC) in Aerosol Coating Products," amended May 25, 2018, IBR approved for § 63.8055(b).

(2) Method 428, "Determination Of Polychlorinated Dibenzo-P-Dioxin (PCDD), Polychlorinated Dibenzofuran (PCDF), and Polychlorinated Biphenyle Emissions from Stationary Sources," amended September 12, 1990, IBR approved for § 63.849(a)(13) and (14).

(3) Method 429, Determination of Polycyclic Aromatic Hydrocarbon (PAH) Emissions from Stationary Sources, Adopted September 12, 1989, Amended July 28, 1997, IBR approved for § 63.1625(b).

(4) California Air Resources Board Vapor Recovery Test Procedure TP–201.1—"Volumetric Efficiency for Phase I Vapor Recovery Systems," adopted April 12, 1996, and amended February 1, 2001 and October 8, 2003, IBR approved for § 63.11120(b).

(5) California Air Resources Board Vapor Recovery Test Procedure TP–201.1E—"Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves," adopted October 8, 2003, IBR approved for § 63.11120(a).

(6) California Air Resources Board Vapor Recovery Test Procedure TP–201.3—"Determination of 2-Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities," adopted April 12, 1996 and amended March 17, 1999, IBR approved for § 63.11120(a).

(m) Composite Panel Association, 19465 Deerfield Avenue, Suite 306, Leesburg, VA 20176, Telephone (703)724–1128, and www.compositepanel.org.

(1) ANSI A135.4–2012, Basic Hardboard, approved June 8, 2012, IBR approved for § 63.4781.

(2) [Reserved]

(n) Environmental Protection Agency. Air and Radiation Docket and Information Center, 1200 Pennsylvania Avenue NW., Washington, DC 20460, telephone number (202) 566–1745.

(1) *California Regulatory Requirements Applicable to the Air Toxics Program,* November 16, 2010, IBR approved for § 63.99(a).

(2) New Jersey's *Toxic Catastrophe Prevention Act Program,* (July 20, 1998), IBR approved for § 63.99(a).

(3) Delaware Department of Natural Resources and Environmental Control, Division of Air and Waste Management, Accidental Release Prevention Regulation, sections 1 through 5 and sections 7 through 14, effective January 11, 1999, IBR approved for § 63.99(a).

(4) State of Delaware Regulations Governing the Control of Air Pollution (October 2000), IBR approved for § 63.99(a).

(5) Massachusetts Department of Environmental Protection regulations at 310 CMR 7.26(10)–(16), Air Pollution Control, effective as of September 5, 2008, corrected March 6, 2009, and 310 CMR 70.00, Environmental Results Program Certification, effective as of December 28, 2007. IBR approved for § 63.99(a).

(6)

(i) New Hampshire Regulations at Env-Sw 2100, Management and Control of Asbestos Disposal Sites Not Operated after July 9, 1981, effective February 16, 2010 (including a letter from Thomas S. Burack, Commissioner, Department of Environmental Services, State of New Hampshire, to Carol J. Holahan, Director, Office of Legislative Services, dated February 12, 2010, certifying that the enclosed rule, Env-Sw 2100, is the official version of this rule), IBR approved for § 63.99(a).

(ii) New Hampshire Code of Administrative Rules: Chapter Env-A 1800, Asbestos Management and Control, effective as of May 5, 2017 (certified with June 23, 2017 letter from Clark B. Freise, Assistant Commissioner, Department of Environmental Services, State of New Hampshire), as follows: Revision Notes #1 and #2; Part Env-A 1801–1807, excluding Env-A 1801.02(e), Env-A 1801.07, Env-A 1802.02, Env-A 1802.04, Env-A 1802.07–1802.09, Env-A 1802.13, Env-A 1802.15–1802.17, Env-A 1802.25, Env-A 1802.31, Env-A 1802.37, Env-A 1802.40, Env-A 1802.44, and Env-A 1803.05–1803.09; and Appendices B, C, and D; IBR approved for § 63.99(a).

(7) Maine Department of Environmental Protection regulations at Chapter 125, Perchloroethylene Dry Cleaner Regulation, effective as of June 2, 1991, last amended on June 24, 2009. IBR approved for § 63.99(a).

(8) California South Coast Air Quality Management District's “Spray Equipment Transfer Efficiency Test Procedure for Equipment User, May 24, 1989,” IBR approved for §§ 63.11173(e) and 63.11516(d).

(9) California South Coast Air Quality Management District's “Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns, September 26, 2002,” Revision 0, IBR approved for §§ 63.11173(e) and 63.11516(d).

(10) Rhode Island Department of Environmental Management regulations at Air Pollution Control Regulation No. 36, Control of Emissions from Organic Solvent Cleaning, effective April 8, 1996, last amended October 9, 2008, IBR approved for § 63.99(a).

(11) Rhode Island Air Pollution Control, General Definitions Regulation, effective July 19, 2007, last amended October 9, 2008. IBR approved for § 63.99(a).

(12) Alaska Statute 42.45.045. Renewable energy grant fund and recommendation program, available at http://www.legis.state.ak.us/basis/folio.asp, IBR approved for § 63.6675.

(13) Vermont Air Pollution Control Regulations, Chapter 5, Air Pollution Control, section 5–253.11, Perchloroethylene Dry Cleaning, effective as of December 15, 2016. Incorporation by reference approved for § 63.99(a).

(o) U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue NW., Washington, DC 20460, (202) 272–0167, http://www.epa.gov.

(1) EPA–453/R–08–002, Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Primer-Surfacer and Topcoat, published September 2008, IBR approved for §§ 63.3130(c), 63.3161(d) and (g), 63.3165(e), and appendix A to subpart IIII.

(2) EPA–453/R–01–005, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Integrated Iron and Steel Plants—Background Information for Proposed Standards, Final Report, January 2001, IBR approved for § 63.7491(g).

(3) [Reserved]

(4) EPA–454/R–98–015, Office of Air Quality Planning and Standards (OAQPS), Fabric Filter Bag Leak Detection Guidance, September 1997, https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=2000D5T6.PDF; IBR approved for §§ 63.548(e); 63.864(e); 63.7525(j); 63.8450(e); 63.8600(e); 63.9632(a); 63.9804(f); 63.11224(f); 63.11423(e).

(5) EPA–454/R–99–005, Office of Air Quality Planning and Standards (OAQPS), Meteorological Monitoring Guidance for Regulatory Modeling Applications, February 2000, IBR approved for appendix A to this part: Method 325A.

(6) EPA/600/R–12/531, EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards, May 2012, IBR approved for § 63.2163(b).

(7) EPA–625/3–89–016, Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and –Dibenzofurans (CDDs and CDFs) and 1989 Update, March 1989. IBR approved for § 63.1513(d).

(8) SW–846–0011, Sampling for Selected Aldehyde and Ketone Emissions from Stationary Sources, Revision 0, December 1996, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for table 4 to subpart DDDD.

(9) SW–846–3020A, Acid Digestion of Aqueous Samples And Extracts For Total Metals For Analysis By GFAA Spectroscopy, Revision 1, July 1992, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJJ.

(10) SW–846–3050B, Acid Digestion of Sediments, Sludges, and Soils, Revision 2, December 1996, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJJ.

(11) SW–846–5030B, Purge-And-Trap For Aqueous Samples, Revision 2, December 1996, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for § 63.2492(b) and (c).

(12) SW–846–5031, Volatile, Nonpurgeable, Water-Soluble Compounds by Azeotropic Distillation, Revision 0, December 1996, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for § 63.2492(b) and (c).

(13) SW–846–7470A, Mercury In Liquid Waste (Manual Cold-Vapor Technique), Revision 1, September 1994, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJJ.

(14) SW–846–7471B, Mercury In Solid Or Semisolid Waste (Manual Cold-Vapor Technique), Revision 2, February 2007, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJJ.

(15) SW–846–8015C, Nonhalogenated Organics by Gas Chromatography, Revision 3, February 2007, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for §§ 63.11960, 63.11980, and table 10 to subpart HHHHHHH.

(16) SW–846–8260B, Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS), Revision 2, December 1996, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for §§ 63.1107(a), 63.11960, 63.11980, and table 10 to subpart HHHHHHH.

(17) SW–846–8260D, Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry, Revision 4, June 2018, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for § 63.2492(b) and (c).

(18) SW–846–8270D, Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS), Revision 4, February 2007, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for §§ 63.1107(a), 63.11960, 63.11980, and table 10 to subpart HHHHHHH.

(19) SW–846–8315A, Determination of Carbonyl Compounds by High Performance Liquid Chromatography (HPLC), Revision 1, December 1996, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for §§ 63.11960 and 63.11980, and table 10 to subpart HHHHHHH.

(20) SW–846–5050, Bomb Preparation Method for Solid Waste, Revision 0, September 1994, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition IBR approved for table 6 to subpart DDDDD.

(21) SW–846–6010C, Inductively Coupled Plasma-Atomic Emission Spectrometry, Revision 3, February 2007, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for table 6 to subpart DDDDD.

(22) SW–846–6020A, Inductively Coupled Plasma-Mass Spectrometry, Revision 1, February 2007, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for table 6 to subpart DDDDD.

(23) SW–846–7060A, Arsenic (Atomic Absorption, Furnace Technique), Revision 1, September 1994, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for table 6 to subpart DDDDD.

(24) SW–846–7740, Selenium (Atomic Absorption, Furnace Technique), Revision 0, September 1986, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for table 6 to subpart DDDDD.

(25) SW–846–9056, Determination of Inorganic Anions by Ion Chromatography, Revision 1, February 2007, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for table 6 to subpart DDDDD.

(26) SW–846–9076, Test Method for Total Chlorine in New and Used Petroleum Products by Oxidative Combustion and Microcoulometry, Revision 0, September 1994, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for table 6 to subpart DDDDD.

(27) SW–846–9250, Chloride (Colorimetric, Automated Ferricyanide AAI), Revision 0, September 1986, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for table 6 to subpart DDDDD.

(28) Method 200.8, Determination of Trace Elements in Waters and Wastes by Inductively Coupled Plasma—Mass Spectrometry, Revision 5.4, 1994, IBR approved for table 6 to subpart DDDDD.

(29) Method 1631 Revision E, Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Atomic Absorption Fluorescence Spectrometry, Revision E, EPA–821–R–02–019, August 2002, IBR approved for table 6 to subpart DDDDD.

(p) International Standards Organization (ISO), 1, ch. de la Voie-Creuse, Case postale 56, CH–1211 Geneva 20, Switzerland, + 41 22 749 01 11, http://www.iso.org/iso/home.htm.

(1) ISO 6978–1:2003(E), Natural Gas—Determination of Mercury—Part 1: Sampling of Mercury by Chemisorption on Iodine, First edition, October 15, 2003, IBR approved for table 6 to subpart DDDDD.

(2) ISO 6978–2:2003(E), Natural gas—Determination of Mercury—Part 2: Sampling of Mercury by Amalgamation on Gold/Platinum Alloy, First edition, October 15, 2003, IBR approved for table 6 to subpart DDDDD.

(3) ISO 16017–2:2003(E): Indoor, ambient and workplace air—sampling and analysis of volatile organic compounds by sorbent tube/thermal desorption/capillary gas chromatography—Part 2: Diffusive sampling, May 15, 2003, IBR approved for appendix A to this part: Method 325A and Method 325B.

(q) National Council of the Paper Industry for Air and Stream Improvement, Inc. (NCASI), P.O. Box 133318, Research Triangle Park, NC 27709–3318 or at http://www.ncasi.org.

(1) NCASI Method DI/MEOH–94.03, Methanol in Process Liquids and Wastewaters by GC/FID, Issued May 2000, IBR approved for §§ 63.457 and 63.459.

(2) NCASI Method CI/WP–98.01, Chilled Impinger Method For Use At Wood Products Mills to Measure Formaldehyde, Methanol, and Phenol, 1998, Methods Manual, IBR approved for table 4 to subpart DDDD.

(3) NCASI Method DI/HAPS–99.01, Selected HAPs In Condensates by GC/FID, Issued February 2000, IBR approved for § 63.459(b).

(4) NCASI Method IM/CAN/WP–99.02, Impinger/Canister Source Sampling Method for Selected HAPs and Other Compounds at Wood Products Facilities, January 2004, Methods Manual, IBR approved for table 4 to subpart DDDD.

(5) NCASI Method ISS/FP A105.01, Impinger Source Sampling Method for Selected Aldehydes, Ketones, and Polar Compounds, December 2005, Methods Manual, IBR approved for table 4 to subpart DDDD and §§ 63.4751(i) and 63.4752(e).

(r) National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161, (703) 605–6000 or (800) 553–6847; or for purchase from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, (202) 512–1800.

(1) Handbook 44, Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices 1998, IBR approved for § 63.1303(e).

(2) "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW–846, Third Edition. (A suffix of "A" in the method number indicates revision one (the method has been revised once). A suffix of "B" in the method number indicates revision two (the method has been revised twice).

(i) Method 0023A, "Sampling Method for Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofuran Emissions from Stationary Sources," Revision 2, dated August 2018, IBR approved for § 63.1208(b).

(ii) Method 9071B, "n-Hexane Extractable Material (HEM) for Sludge, Sediment, and Solid Samples," dated April 1998, IBR approved for § 63.7824(e).

(iii) Method 9095A, "Paint Filter Liquids Test," dated December 1996, IBR approved for §§ 63.7700(b) and 63.7765.

(iv) Method 9095B, "Paint Filter Liquids Test," (revision 2), dated November 2004, IBR approved for the definition of "Free organic liquids" in §§ 63.10692, 63.10885(a), and the definition of "Free liquids" in § 63.10906.

(v) SW–846 74741B, Revision 2, "Mercury in Solid or Semisolid Waste (Manual Cold-Vapor Technique)," February 2007, IBR approved for § 63.11647(f).

(3) National Institute of Occupational Safety and Health (NIOSH) test method compendium, "NIOSH Manual of Analytical Methods," NIOSH publication no. 94–113, Fourth Edition, August 15, 1994.

(i) NIOSH Method 2010, "Amines, Aliphatic," Issue 2, August 15, 1994, IBR approved for § 63.7732(g).

(ii) [Reserved]

(s) North American Electric Reliability Corporation, 1325 G Street, NW., Suite 600, Washington, DC 20005–3801, http://www.nerc.com, http://www.nerc.com/files/EOP0002-3_1.pdf.

(1) North American Electric Reliability Corporation Reliability Standard EOP–002–3, Capacity and Energy Emergencies, adopted August 5, 2010, IBR approved for § 63.6640(f).

(2) [Reserved]

(t) Technical Association of the Pulp and Paper Industry (TAPPI), 15 Technology Parkway South, Norcross, GA 30092, (800) 332–8686, http://www.tappi.org.

(1) TAPPI T 266, Determination of Sodium, Calcium, Copper, Iron, and Manganese in Pulp and Paper by Atomic Absorption Spectroscopy (Reaffirmation of T 266 om-02), Draft No. 2, July 2006, IBR approved for table 6 to subpart DDDDD.

(2) [Reserved]

(u) Texas Commission on Environmental Quality (TCEQ) Library, Post Office Box 13087, Austin, Texas 78711–3087, telephone number (512) 239–0028, http://www.tceq.state.tx.us/assets/public/implementation/air/sip/sipdocs/2002-12-HGB/02046sipapp_ado.pdf.

(1) "Air Stripping Method (Modified El Paso Method) for Determination of Volatile Organic Compound Emissions from Water Sources," Revision Number One, dated January 2003, Sampling Procedures Manual, Appendix P: Cooling Tower Monitoring, January 31, 2003, IBR approved for §§ 63.654(c) and (g), 63.655(i), 63.1086(e), 63.1089, 63.2490(d), 63.2525(r), and 63.11920.

(2) [Reserved]

Editorial Note

Editorial Note: For Federal Register citations affecting § 63.14, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at *www.govinfo.gov.*

§ 63.15 Availability of information and confidentiality.

(a) *Availability of information.*

(1) With the exception of information protected through part 2 of this chapter, all reports, records, and other information collected by the Administrator under this part are available to the public. In addition, a copy of each permit application, compliance plan (including the schedule of compliance), notification of compliance status, excess emissions and continuous monitoring systems performance report, and title V permit is available to the public, consistent with protections recognized in section 503(e) of the Act.

(2) The availability to the public of information provided to or otherwise obtained by the Administrator under this part shall be governed by part 2 of this chapter.

(b) *Confidentiality.*

(1) If an owner or operator is required to submit information entitled to protection from disclosure under section 114(c) of the Act, the owner or operator may submit such information separately. The requirements of section 114(c) shall apply to such information.

(2) The contents of a title V permit shall not be entitled to protection under section 114(c) of the Act; however, information submitted as part of an application for a title V permit may be entitled to protection from disclosure.

§ 63.16 Performance Track Provisions.

(a) Notwithstanding any other requirements in this part, an affected source at any major source or any area source at a Performance Track member facility, which is subject to regular periodic reporting under any subpart of this part, may submit such periodic reports at an interval that is twice the length of the regular period specified in the applicable subparts; provided, that for sources subject to permits under 40 CFR part 70 or 71 no interval so calculated for any report of the results of any required monitoring may be less frequent than once in every six months.

(b) Notwithstanding any other requirements in this part, the modifications of reporting requirements in paragraph (c) of this section apply to any major source at a Performance Track member facility which is subject to requirements under any of the subparts of this part and which has:

(1) Reduced its total HAP emissions to less than 25 tons per year;

(2) Reduced its emissions of each individual HAP to less than 10 tons per year; and

(3) Reduced emissions of all HAPs covered by each MACT standard to at least the level required for full compliance with the applicable emission standard.

(c) For affected sources at any area source at a Performance Track member facility and which meet the requirements of paragraph (b)(3) of this section, or for affected sources at any major source that meet the requirements of paragraph (b) of this section:

(1) If the emission standard to which the affected source is subject is based on add-on control technology, and the affected source complies by using add-on control technology, then all required reporting elements in the periodic report may be met through an annual certification that the affected source is meeting the emission standard by continuing to use that control technology. The affected source must continue to meet all relevant monitoring and recordkeeping requirements. The compliance certification must meet the requirements delineated in Clean Air Act section 114(a)(3).

(2) If the emission standard to which the affected source is subject is based on add-on control technology, and the affected source complies by using pollution prevention, then all required reporting elements in the periodic report may be met through an annual certification that the affected source is continuing to use pollution prevention to reduce HAP emissions to levels at or below those required by the applicable emission standard. The affected source must maintain records of all calculations that demonstrate the level of HAP emissions required by the emission standard as well as the level of HAP emissions achieved by the affected source. The affected source must continue to meet all relevant monitoring and recordkeeping requirements. The compliance certification must meet the requirements delineated in Clean Air Act section 114(a)(3).

(3) If the emission standard to which the affected source is subject is based on pollution prevention, and the affected source complies by using pollution prevention and reduces emissions by an additional 50 percent or greater than required by the applicable emission standard, then all required reporting elements in the periodic report may be met through an annual certification that the affected source is continuing to use pollution prevention to reduce HAP emissions by an additional 50 percent or greater than required by the applicable emission standard. The affected source must maintain records of all calculations that demonstrate the level of HAP emissions required by the emission standard as well as the level of HAP emissions achieved by the affected source. The affected source must continue to meet all relevant monitoring and recordkeeping requirements. The compliance certification must meet the requirements delineated in Clean Air Act section 114(a)(3).

(4) Notwithstanding the provisions of paragraphs (c)(1) through (3), of this section, for sources subject to permits under 40 CFR part 70 or 71, the results of any required monitoring and recordkeeping must be reported not less frequently than once in every six months.

Table 1 to Subpart A of Part 63 - Detection Sensitivity Levels (grams per hour)

Monitoring frequency per subpart[a]	Detection sensitivity level
Bi-Monthly	60
Semi-Quarterly	85
Monthly	100

[a] When this alternative work practice is used to identify leaking equipment, the owner or operator must choose one of the monitoring frequencies listed in this table, in lieu of the monitoring frequency specified in the applicable subpart. Bi-monthly means every other month. Semi-quarterly means twice per quarter. Monthly means once per month.

Appendix O. 40 CFR pt. 63, subp. RRRRR—National Emission Standards for Hazardous Air Pollutants: Taconite Iron Ore Processing

§63.9580 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for taconite iron ore processing. This subpart also establishes requirements to demonstrate initial and continuous compliance with all applicable emission limitations (emission limits and operating limits), work practice standards, and operation and maintenance requirements in this subpart.

§63.9581 Am I subject to this subpart?

You are subject to this subpart if you own or operate a taconite iron ore processing plant that is (or is part of) a major source of hazardous air pollutant (HAP) emissions. Your taconite iron ore processing plant is a major source of HAP if it emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

§63.9582 What parts of my plant does this subpart cover?

(a) This subpart applies to each new and existing affected source at your taconite iron ore processing plant.

(b) The affected sources are each new or existing ore crushing and handling operation, ore dryer, indurating furnace, and finished pellet handling operation at your taconite iron ore processing plant, as defined in §63.9652.

(c) This subpart covers emissions from ore crushing and handling emission units, ore dryer stacks, indurating furnace stacks, finished pellet handling emission units, and fugitive dust emissions.

(d) An ore crushing and handling operation, ore dryer, indurating furnace, or finished pellet handling operation at your taconite iron ore processing plant is existing if you commenced construction or reconstruction of the affected source before December 18, 2002.

(e) An ore crushing and handling operation, ore dryer, indurating furnace, or finished pellet handling operation at your taconite iron ore processing plant is new if you commence construction or reconstruction of the affected source on or after December 18, 2002. An affected source is reconstructed if it meets the definition of reconstruction in §63.2.

§63.9583 When do I have to comply with this subpart?

(a) If you have an existing affected source, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you no later than October 30, 2006, except as specified in paragraph (f) of this section.

(b) If you have a new affected source and its initial startup date is on or before October 30, 2003, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you by October 30, 2003, except as specified in paragraph (f) of this section.

(c) If you have a new affected source and its initial startup date is after October 30, 2003, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you upon initial startup, except as specified in paragraph (f) of this section.

(d) If your taconite iron ore processing plant is an area source that becomes a major source of HAP, the compliance dates in paragraphs (d)(1) and (2) of this section apply to you.

(1) Any portion of the taconite iron ore processing plant that is a new affected source or a new reconstructed source must be in compliance with this subpart upon startup.

(2) All other parts of the taconite iron ore processing plant must be in compliance with this subpart no later than 3 years after the plant becomes a major source.

(e) You must meet the notification and schedule requirements in § 63.9640. Several of these notifications must be submitted before the compliance date for your affected source.

(f) If you have an affected indurating furnace that commenced construction before May 15, 2023, you must comply with the requirements in paragraphs (f)(1) through (7) of this section by March 8, 2027. If you have an affected indurating furnace that commenced construction or reconstruction on or after May 15, 2023, you must comply with the requirements in paragraphs (f)(1) through (7) of this section by March 6, 2024 or the date of initial startup, whichever is later.

(1) All applicable emission limits for mercury, hydrogen chloride, and hydrogen fluoride in tables 2 and 3 to this subpart.

(2) All applicable operating limits in § 63.9590(b)(5) through (8), established in accordance with § 63.9622(g) through (i), for each control device used to comply with the mercury, hydrogen chloride, and hydrogen fluoride emission limits.

(3) All applicable compliance requirements in §§ 63.9600, 63.9610, 63.9623, 63.9625, and 63.9637(a).

(4) The applicable performance testing or continuous emissions monitoring system (CEMS) requirements for mercury in §§ 63.9620(k), 63.9621(d), and 63.9630.

(5) All applicable performance testing requirements in §§ 63.9620(l), 63.9621(d), and 63.9630.

(6) The requirements to install and maintain monitoring equipment in § 63.6332(g) through (i) and the monitoring requirements in §§ 63.9631, 63.9633, and 63.9634 for each control device used to comply with the mercury, hydrogen chloride and hydrogen fluoride emission limits.

(7) The notification, reporting and recordkeeping requirements in §§ 63.9640, 63.9641, 63.9642, and 63.9643 applicable to the mercury, hydrogen chloride, and hydrogen fluoride emission standards.

Emission Limitations and Work Practice Standards

§63.9590 What emission limitations must I meet?

(a) You must meet each emission limit in tables 1 through 3 to this subpart that applies to you by the applicable compliance date specified in § 63.9583.

(b) You must meet each applicable operating limit for control devices in paragraphs (b)(1) through (8) of this section that applies to you by the applicable compliance date specified in § 63.9583. You are not required to establish and comply with operating limits for control devices used to reduce mercury emissions when you are using a CEMS to monitor and demonstrate compliance with the mercury emission limit in table 2 to this subpart.

(1) Except as provided in paragraph (b)(2) of this section, for each wet scrubber applied to meet any particulate matter emission limit in table 1 to this subpart, you must maintain the daily average pressure drop and daily average scrubber water flow rate at or above the minimum levels established in § 63.9622.

(2) On or before January 28, 2022, for affected sources that commenced construction or reconstruction on or before September 25, 2019, for each dynamic wet scrubber applied to meet any particulate matter emission limit in table 1 to this subpart, you must maintain the daily average scrubber water flow rate and either the daily average fan amperage (a surrogate for fan speed as revolutions per minute) or the daily average pressure drop at or above the minimum levels established during the initial performance test. After January 28, 2022, for affected sources that commenced construction or reconstruction on or before

September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, for each dynamic wet scrubber applied to meet any particulate matter emission limit in table 1 to this subpart, you must maintain the daily average scrubber water flow rate and the daily average fan amperage (a surrogate for fan speed as revolutions per minute) at or above the minimum levels established in § 63.9622.

(3) For each dry electrostatic precipitator (ESP) applied to meet any particulate matter emission limit in Table 1 to this subpart, you must meet the operating limits in paragraph (b)(3)(i) or (ii) of this section.

(i) Maintain the 6-minute average opacity of emissions exiting the control device stack at or below the level established during the initial performance test.

(ii) Maintain the daily average secondary voltage and daily average secondary current for each field at or above the minimum levels established during the initial performance test.

(4) For each wet ESP applied to meet any particulate matter emission limit in table 1 to this subpart, you must meet the operating limits in paragraphs (b)(4)(i) through (iii) of this section.

(i) Maintain the daily average secondary voltage for each field at or above the minimum levels established during the initial performance test.

(ii) Maintain the daily average stack outlet temperature at or below the maximum levels established during the initial performance test.

(iii) Maintain the daily average water flow rate at or above the minimum levels established during the initial performance test.

(5) For each wet scrubber and wet ESP used to meet the hydrogen chloride and hydrogen fluoride emission limits in table 3 to this subpart, you must maintain the daily average scrubber water flow rate and pH greater than or equal to the operating limits established for these parameters established in § 63.9622.

(6) For each activated carbon injection (ACI) system used to meet the mercury emission limit in table 2 to this subpart, you must maintain the daily average activated carbon injection rate greater than or equal to the average activated carbon injection rate established during the most recent performance test demonstrating compliance with the applicable emission limit. In addition, you must maintain the daily average carrier gas flow rate greater than or equal to the average carrier gas flow rate established during the most recent performance test demonstrating compliance with the applicable emission limit.

(7) For each dry sorbent injection (DSI) system used to meet the hydrogen chloride and hydrogen fluoride emission limits in table 3 to this subpart, you must maintain the daily average dry sorbent injection rate greater than or equal to the average dry sorbent injection rate established during the most recent performance test. demonstrating compliance with the applicable emission limit. In addition, you must maintain the daily average carrier gas flow rate greater than or equal to the average carrier gas flow rate established during the most recent performance test demonstrating compliance with the applicable emission limit.

(8) If you use any air pollution control device other than a baghouse, wet scrubber, dynamic scrubber, dry ESP, wet ESP, ACI, or DSI, you must submit a site-specific monitoring plan in accordance with § 63.9631(f).

(c) You may petition the Administrator for approval of alternatives to the monitoring requirements in paragraphs (b)(1) through (7) of this section as allowed under § 63.8(f) and as defined in § 63.90.

§63.9591 What work practice standards must I meet?

(a) You must prepare, and at all times operate according to, a fugitive dust emissions control plan that describes in detail the measures that will be put in place to control fugitive dust emissions from the locations listed in paragraphs (a)(1) through (6) of this section.

(1) Stockpiles (includes, but is not limited to, stockpiles of uncrushed ore, crushed ore, or finished pellets);

(2) Material transfer points;

(3) Plant roadways;

(4) Tailings basin;

(5) Pellet loading areas; and

(6) Yard areas.

(b) A copy of your fugitive dust emissions control plan must be submitted for approval to the Administrator on or before the applicable compliance date for the affected source as specified in §63.9583. The requirement for the plant to operate according to the fugitive dust emissions control plan must be incorporated by reference in the operating permit for the plant that is issued by the designated permitting authority under 40 CFR part 70 or 40 CFR part 71.

(c) You can use an existing fugitive dust emissions control plan provided it meets the requirements in paragraphs (c)(1) through (3) of this section.

(1) The plan satisfies the requirements of paragraph (a) of this section.

(2) The plan describes the current measures to control fugitive dust emission sources.

(3) The plan has been approved as part of a State implementation plan or title V permit.

(d) You must maintain a current copy of the fugitive dust emissions control plan onsite, and it must be available for inspection upon request. You must keep the plan for the life of the affected source or until the affected source is no longer subject to the requirements of this subpart.

Operation and Maintenance Requirements

§63.9600 What are my operation and maintenance requirements?

(a) On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, you must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in §63.6(e)(1)(i). After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, at all times, you must always operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(b) You must prepare, and at all times, operate according to, a written operation and maintenance plan for each control device applied to meet any particulate matter emission limit in table 1 to this subpart, mercury emission limit in table 2 to this subpart, hydrogen chloride and hydrogen fluoride emission limit in table 3 to this subpart, and to meet the requirement of each indurating furnace subject to good combustion practices (GCP). Each site-specific operation and maintenance plan must be submitted to the Administrator on or before the compliance date that is specified in § 63.9583 for your affected source. The plan you submit must explain why the chosen practices (*i.e.,* quantified objectives) are effective in performing corrective actions or GCP in

minimizing the formation of formaldehyde (and other products of incomplete combustion). The Administrator will review the adequacy of the site-specific practices and objectives you will follow and the records you will keep demonstrating compliance with your Plan. If the Administrator determines that any portion of your operation and maintenance plan is not adequate, we can reject those portions of the plan, and request that you provide additional information addressing the relevant issues. In the interim of this process, you will continue to follow your current site-specific practices and objectives, as submitted, until your revisions are accepted as adequate by the Administrator. You must maintain a current copy of the operation and maintenance plan onsite, and it must be available for inspection upon request. You must keep the plan for the life of the affected source or until the affected source is no longer subject to the requirements of this subpart. Each operation and maintenance plan must address the elements in paragraphs (b)(1) through (4) of this section. (1) Preventative maintenance for each control device, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

(2) Corrective action procedures for bag leak detection systems. On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, in the event a bag leak detection system alarm is triggered, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. Corrective actions may include, but are not limited to, the actions listed in paragraphs (b)(2)(i) through (vi) of this section. After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, in the event a bag leak detection system alarm is triggered, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. If the alarm sounds more than 5 percent of the operating time during a 6-month period as determined according to §63.9634(d)(3), it is considered an operating parameter deviation. Corrective actions may include, but are not limited to, the actions listed in paragraphs (b)(2)(i) through (vi) of this section.

(i) Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.

(ii) Sealing off defective bags or filter media.

(iii) Replacing defective bags or filter media or otherwise repairing the control device.

(iv) Sealing off a defective baghouse compartment.

(v) Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system.

(vi) Adjusting the process operation producing the particulate emissions.

(3) Corrective action procedures for continuous parameter monitoring systems (CPMS) for all air pollution control devices except for baghouses. In the event you exceed an established operating limit for an air pollution control device except for a baghouse, you must initiate corrective action to determine the cause of the operating limit exceedance and complete the corrective action within 10 calendar days. The corrective action procedures you take must be consistent with the installation, operation, and maintenance procedures listed in your site-specific CPMS monitoring plan in accordance with §63.9632(b).

(4) Good combustion practices for indurating furnaces. You must identify and implement a set of site-specific GCP for each type of indurating furnace at your plant. These GCP should correspond to your standard operating procedures for maintaining the proper and efficient combustion within each indurating

furnace. Good combustion practices include, but are not limited to, the elements listed in paragraphs (b)(4)(i) through (v) of this section.

(i) Proper operating conditions for each indurating furnace (e.g., minimum combustion temperature, maximum carbon monoxide concentration in the furnace exhaust gases, burner alignment, or proper fuel-air distribution/mixing).

(ii) Routine inspection and preventative maintenance and corresponding schedules of each indurating furnace.

(iii) Performance analyses of each indurating furnace.

(iv) Keeping applicable operator logs.

(v) Keeping applicable records to document compliance with each element.

General Compliance Requirements

§63.9610 What are my general requirements for complying with this subpart?

(a) On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, you must be in compliance with the requirements in paragraphs (a)(1) through (6) of this section at all times, except during periods of startup, shutdown, and malfunction. After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, for affected sources that commenced construction or reconstruction after September 25, 2019, you must be in compliance with the emission limitations, standards, and operation and maintenance requirements for the particulate matter emission standards in this subpart at all times. (1) The emission limitations in §63.9590.

(2) The work practice standards in §63.9591.

(3) The operation and maintenance requirements in §63.9600.

(4) The notification requirements in §63.9640.

(5) The reporting requirements in §63.9641.

(6) The recordkeeping requirements in §63.9642.

(b) During the period between the compliance date specified for your affected source in §63.9583 and the date upon which continuous monitoring systems have been installed and certified and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment. This includes the daily monitoring and recordkeeping of air pollution control device operating parameters as specified in §63.9590(b).

(c) On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, you must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3). For affected sources, a startup, shutdown, and malfunction plan is not required after January 25, 2021. No startup, shutdown, and malfunction plan is required for affected sources that commenced construction or reconstruction after September 25, 2019.

(d) On and after the applicable compliance date specified in § 63.9583(f), you must be in compliance with all applicable emission limitations for mercury, hydrogen chloride and hydrogen fluoride in tables 2 and 3 to this subpart and with the requirements in paragraphs (d)(1) through (6) of this section at all times.

(1) All applicable operating limits in § 63.9590(b)(5) through (8).

(2) All applicable operation and maintenance requirements in § 63.9600 for control devices and monitoring equipment used to comply with the emissions limits.

(3) The requirements in § 63.9631(j), if you use emissions averaging to demonstrate compliance with the mercury standards.

(4) The requirements in § 63.9631(k), if you use continuous emissions monitoring system(s) (CEMS) to demonstrate compliance with the mercury standards.

(5) The requirements in § 63.9634(n), if you elect to adjust the activated carbon injection rate based on the taconite pellet production rate.

(6) The notification, reporting and recordkeeping requirements in §§ 63.9640 through 63.9643.

Initial Compliance Requirements

§63.9620 On which units and by what date must I conduct performance tests or other initial compliance demonstrations?

(a) For each ore crushing and handling affected source, you must demonstrate initial compliance with the emission limits in Table 1 to this subpart by conducting an initial performance test for particulate matter as specified in paragraphs (a)(1) and (2) of this section.

(1) Except as provided in paragraph (e) of this section, an initial performance test must be performed on all stacks associated with ore crushing and handling.

(2) Initial performance tests must be completed no later than 180 calendar days after the compliance date specified in § 63.9583. Performance tests conducted between October 30, 2003, and no later than 180 days after the corresponding compliance date can be used for initial compliance demonstration, provided the tests meet the initial performance testing requirements of this subpart. For an indurating furnace with multiple stacks, the performance tests for all stacks must be completed within 7 calendar days of commencement of the performance tests, to the extent practicable, and the indurating furnace and associated control device (where applicable) operating characteristics must remain representative and consistent for the duration of the stack tests. If you determine that the performance tests cannot be completed within 7 calendar days, the Administrator must be notified within 24 hours of making that determination.

(b) For each indurating furnace affected source, you must demonstrate initial compliance with the emission limits in Table 1 to this subpart by conducting an initial performance test for particulate matter as specified in paragraphs (b)(1) and (2) of this section.

(1) An initial performance test must be performed on all stacks associated with each indurating furnace.

(2) Initial performance tests must be completed no later than 180 calendar days after the compliance date specified in §63.9583. Performance tests conducted between October 30, 2003 and no later than 180 days after the corresponding compliance date can be used for initial compliance demonstration, provided the tests meet the initial performance testing requirements of this subpart. For indurating furnaces with multiple stacks, the performance tests for all stacks must be completed within a reasonable period of time, such that the indurating furnace operating characteristics remain representative for the duration of the stack tests.

(c) For each finished pellet handling affected source, you must demonstrate initial compliance with the emission limits in Table 1 to this subpart by conducting an initial performance test for particulate matter as specified in paragraphs (c)(1) and (2) of this section.

(1) Except as provided in paragraph (e) of this section, an initial performance test must be performed on all stacks associated with finished pellet handling.

(2) Initial performance tests must be completed no later than 180 calendar days after the compliance date specified in §63.9583. Performance tests conducted between October 30, 2003 and no later than 180 days after the corresponding compliance date can be used for initial compliance demonstration, provided the tests meet the initial compliance testing requirements of this subpart.

(d) For each ore dryer affected source, you must demonstrate initial compliance with the emission limits in Table 1 to this subpart by conducting an initial performance test for particulate matter as specified in paragraphs (d)(1) and (2) of this section.

(1) An initial performance test must be performed on all stacks associated with each ore dryer.

(2) Initial performance tests must be completed no later than 180 calendar days after the compliance date specified in §63.9583. Performance tests conducted between October 30, 2003 and no later than 180 days after the corresponding compliance date can be used for initial compliance demonstration, provided the tests meet the initial compliance testing requirements of this subpart. For ore dryers with multiple stacks, the performance tests for all stacks must be completed within a reasonable period of time, such that the ore dryer operating characteristics remain representative for the duration of the stack tests.

(e) For ore crushing and handling affected sources and finished pellet handling affected sources, in lieu of conducting initial performance tests for particulate matter on all stacks, you may elect to group a maximum of six similar emission units together and conduct an initial compliance test on one representative emission unit within each group of similar emission units. The determination of whether emission units are similar must meet the criteria in paragraph (f) of this section. If you decide to test representative emission units, you must prepare and submit a testing plan as described in paragraph (g) of this section.

(f) If you elect to test representative emission units as provided in paragraph (e) of this section, the units that are grouped together as similar units must meet the criteria in paragraphs (f)(1) and (2) of this section.

(1) All emission units within a group must be of the same process type (e.g., primary crushers, secondary crushers, tertiary crushers, fine crushers, ore conveyors, ore bins, ore screens, grate feed, pellet loadout, hearth layer, cooling stacks, pellet conveyor, and pellet screens). You cannot group emission units from different process types together for the purposes of this section.

(2) All emission units within a group must also have the same type of air pollution control device (*e.g.,* wet scrubbers, dynamic wet scrubbers, rotoclones, multiclones, wet and dry ESP, and baghouses). You cannot group emission units with different air pollution control device types together for the purposes of this section.

(3) The site-specific operating limits established for the emission unit selected as representative of a group of similar emission units will be used as the operating limit for each emission unit within the group. The operating limit established for the representative unit must be met by each emission unit within the group.

(g) If you plan to conduct initial performance tests on representative emission units within an ore crushing and handling affected source or a finished pellet handling affected source, you must submit a testing plan for initial performance tests. This testing plan must be submitted to the Administrator or delegated authority no later than 90 days prior to the first scheduled initial performance test. The testing plan must contain the information specified in paragraphs (g)(1) through (3) of this section.

(1) A list of all emission units. This list must clearly identify all emission units that have been grouped together as similar emission units. Within each group of emission units, you must identify the emission unit that will be the representative unit for that group and subject to initial performance testing.

(2) A list of the process type and type of air pollution control device on each emission unit.

(3) A schedule indicating when you will conduct an initial performance test for particulate matter for each representative emission unit.

(h) For each work practice standard and operation and maintenance requirement that applies to you where initial compliance is not demonstrated using a performance test, you must demonstrate initial compliance within 30 calendar days after the compliance date that is specified for your affected source in §63.9583.

(i) If you commenced construction or reconstruction of an affected source between December 18, 2002 and October 30, 2003 , you must demonstrate initial compliance with either the proposed emission limit or the promulgated emission limit no later than 180 calendar days after October 30, 2003 or no later than 180 calendar days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(j) If you commenced construction or reconstruction of an affected source between December 18, 2002 and October 30, 2003, and you chose to comply with the proposed emission limit when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limit by 3 years and 180 calendar days after October 30, 2003, or after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(k) For each indurating furnace, you must demonstrate initial compliance with the mercury emission limits in table 2 to this subpart in accordance with the procedures specified in either paragraph (k)(1) or (2) of this section.

(1) Complete an initial performance test on all stacks associated with each indurating furnace no later than 180 calendar days after the compliance date specified in § 63.9583(f). Performance tests conducted between March 6, 2024 and 180 days after the corresponding compliance date can be used for initial compliance demonstration, provided the tests meet the initial performance testing requirements of this subpart. For an indurating furnace with multiple stacks, the performance tests for all stacks must be completed within 7 calendar days of commencement of the performance tests, to the extent practicable, and the indurating furnace and associated control device (where applicable) operating characteristics must remain representative and consistent for the duration of the stack tests. If you determine that the performance tests cannot be completed within 7 calendar days, the Administrator must be notified within 24 hours of making that determination.

(2) You may use a 30-day rolling average of the 1-hour arithmetic average CEMS data. You must conduct a performance evaluation of each CEMS within 180 days of installation of the monitoring system. The initial performance evaluation must be conducted prior to collecting CEMS data that will be used for the initial compliance demonstration.

(l) For each indurating furnace, you must demonstrate initial compliance with the emission limits in table 3 to this subpart by conducting initial performance tests for hydrogen chloride and hydrogen fluoride on all stacks associated with each indurating furnace. Initial performance tests must be completed no later than 180 calendar days after the compliance date specified in § 63.9583(f). Performance tests conducted between March 6, 2024 and 180 days after the corresponding compliance date can be used for initial compliance demonstration, provided the tests meet the initial performance testing requirements of this subpart. For an indurating furnace with multiple stacks, the performance tests for all stacks must be completed within 7 calendar days of commencement of the performance tests, to the extent practicable, and the indurating furnace and associated control device (where applicable) operating characteristics must remain representative and consistent for the duration of the stack tests. If you determine that the performance tests cannot be conducted within 7 calendar days, the Administrator must be notified within 24 hours of making that determination.

§63.9621 What test methods and other procedures must I use to demonstrate initial compliance with the emission limits?

(a) On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, you must conduct each performance test that applies to your affected source according to the requirements in § 63.7(e)(1) and paragraphs (b) and (c) of this section. After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, you must conduct each performance test that applies to your affected source, including the initial performance tests for mercury required in § 63.9620(k)(1) and the initial performance tests for hydrogen chloride and hydrogen fluoride required in § 63.9620(l), under normal operating conditions of the affected source. The owner or operator may not conduct performance tests during periods of malfunction. The owner or operator must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests. You must also conduct each performance test that applies to your affected source according to the requirements in paragraphs (b) and (c) of this section. (b) For each ore crushing and handling affected source and each finished pellet handling affected source, you must determine compliance with the applicable emission limit for particulate matter in Table 1 to this subpart by following the test methods and procedures in paragraphs (b)(1) through (3) of this section.

(1) Except as provided in § 63.9620(e), determine the concentration of particulate matter in the stack gas for each emission unit according to the test methods listed in paragraphs (b)(1)(i) through (v) of this section.

(i) EPA Method 1 or 1A in appendix A-1 to part 60 of this chapter to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.

(ii) EPA Method 2, 2A, 2C, 2D, or 2F in appendix A-1 to part 60 of this chapter or EPA Method 2G in appendix A-2 to part 60 of this chapter, as applicable, to determine the volumetric flow rate of the stack gas.

(iii) EPA Method 3A or 3B in appendix A-2 to part 60 of this chapter to determine the dry molecular weight of the stack gas. The voluntary consensus standard ANSI/ASME PTC 19.10-1981 (incorporated by reference-see §63.14) may be used as an alternative to the manual procedures (but not instrumental procedures) in EPA Method 3B. (iv) EPA Method 4 in appendix A-3 to part 60 of this chapter to determine the moisture content of the stack gas.

(iv) EPA Method 4 in appendix A-3 to part 60 of this chapter to determine the moisture content of the stack gas.

(v) EPA Method 5 or 5D in appendix A-3 to part 60 of this chapter or EPA Method 17 in appendix A-6 to part 60 of this chapter to determine the concentration of particulate matter.

(2) Each EPA Method 5, 5D, or 17 performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. If any measurement result is reported as below the method detection limit, use the method detection limit for that value when calculating the average particulate matter concentration. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of this section.

$$C_i = \frac{C_1 + C_2 + C_3}{3} \qquad (Eq.\ 1)$$

Where:

C_i = Average particulate matter concentration for emission unit, grains per dry standard cubic foot, (gr/dscf);

C_1 = Particulate matter concentration for run 1 corresponding to emission unit, gr/dscf;

C_2 = Particulate matter concentration for run 2 corresponding to emission unit, gr/dscf; and

C_3 = Particulate matter concentration for run 3 corresponding to emission unit, gr/dscf.

(3) For each ore crushing and handling affected source and each finished pellet handling affected source, you must determine the flow-weighted mean concentration of particulate matter emissions from all emission units in each affected source following the procedure in paragraph (b)(3)(i) or (ii) of this section.

(i) If an initial performance test is conducted on all emission units within an affected source, calculate the flow-weighted mean concentration of particulate matter emissions from the affected source using Equation 2 of this section.

$$C_a = \frac{\sum_{i=1}^{n}(C_i * Q_i)}{\sum_{i=1}^{n} Q_i} \qquad (Eq.\ 2)$$

Where:

C_a = Flow-weighted mean concentration of particulate matter for all emission units within affected source, (gr/dscf);

C_i = Average particulate matter concentration measured during the performance test from emission unit "i" in affected source, as determined using Equation 1 of this section, gr/dscf;

Q_i = Average volumetric flow rate of stack gas measured during the performance test from emission unit "i" in affected source, dscf/hr; and

n = Number of emission units in affected source.

(ii) If you are grouping similar emission units together in accordance with §63.9620(e), you must follow the procedures in paragraphs (b)(3)(ii)(A) through (C) of this section.

(A) Assign the average particulate matter concentration measured from the representative unit, as determined from Equation 1 of this section, to each emission unit within the corresponding group of similar units.

(B) Establish the maximum operating volumetric flow rate of exhaust gas from each emission unit within each group of similar units.

(C) Using the data from paragraphs (b)(3)(ii)(A) and (B) of this section, calculate the flow-weighted mean concentration of particulate matter emissions from the affected source using Equation 3 of this section.

$$C_a = \frac{\sum_{k=1}^{m}(C_k * Q_k)}{\sum_{k=1}^{m} Q_k} \qquad (Eq.\ 3)$$

Where:

C_a = Flow-weighted mean concentration of particulate matter for all emission units within affected source, gr/dscf;

C_k = Average particulate matter concentration measured during the performance test from the representative emission unit in group "k" of affected source "a," as determined using Equation 1 of this section, gr/dscf;

Q_k = Sum of the maximum operating volumetric flow rates of stack gas from all similar emission units within group "k" of affected source, dscf/hr; and

m = Number of similar emission unit groups in affected source.

(c) For each ore dryer affected source and each indurating furnace affected source, you must determine compliance with the applicable emission limit for particulate matter in table 1 to this subpart by following the test methods and procedures in paragraphs (c)(1) through (2) of this section. (1) Determine the concentration of particulate matter for each stack according to the test methods listed in paragraphs (c)(1)(i) through (v) of this section.

(i) EPA Method 1 or 1A in appendix A-1 to part 60 of this chapter to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.

(ii) EPA Method 2, 2A, 2C, 2D, or 2F in appendix A-1 to part 60 of this chapter or EPA Method 2G in appendix A-2 to part 60 of this chapter, as applicable, to determine the volumetric flow rate of the stack gas.

(iii) EPA Method 3A or 3B in appendix A-2 to part 60 of this chapter to determine the dry molecular weight of the stack gas. The voluntary consensus standard ANSI/ASME PTC 19.10-1981 (incorporated by reference-see §63.14) may be used as an alternative to the manual procedures (but not instrumental procedures) in EPA Method 3B.

(iv) EPA Method 4 in appendix A-3 to part 60 of this chapter to determine the moisture content of the stack gas.

(v) EPA Method 5 or 5D in appendix A-3 to part 60 of this chapter to determine the concentration of particulate matter.

(2) Each EPA Method 5 or 5D performance test must consist of three separate runs. Each run must be conducted for a minimum of 1 hour. If any measurement result is reported as below the method detection limit, use the method detection limit for that value when calculating the average particulate matter concentration. The average particulate matter concentration from the three runs will be used to determine compliance, as shown in Equation 1 of this section.

(3) For each ore dryer and each indurating furnace with multiple stacks, calculate the flow-weighted mean concentration of particulate matter emissions using Equation 4 of this section.

$$C_a = \frac{\sum_{j=1}^{n}(C_j * Q_j)}{\sum_{j=1}^{n} Q_j} \qquad (Eq.\ 4)$$

Where:

C_b = Flow-weighted mean concentration of particulate matter for all stacks associated with affected source, gr/dscf;

C_j = Average particulate matter concentration measured during the performance test from stack "j" in affected source, as determined using Equation 1 of this section, gr/dscf;

Q_j = Average volumetric flow rate of stack gas measured during the performance test from stack "j" in affected source, dscf/hr;

n = Number of stacks associated with affected source.

(d) For each indurating furnace subject to the initial performance testing under § 63.9620(k)(1) or (l), you must determine compliance with the applicable emission limits for mercury, hydrogen chloride and hydrogen fluoride in tables 2 and 3 to this subpart by following the test methods and procedures in paragraphs (d)(1) through (9) of this section. You are not required to complete the initial performance test for mercury emissions when you are using a CEMS in accordance with paragraph (e) of this section.

(1) The furnace must be operated at or above 90 percent of capacity throughout the duration of the performance testing. If testing cannot be performed at or above 90 percent of capacity, you must provide an explanation for the lower production rate in your performance test plan. The lower production rate must be approved by the Administrator prior to beginning performance testing. For indurating furnaces that comply with the mercury emissions limit in table 2 to this subpart by adjusting the activated carbon injection rate based on the taconite pellet production rate, you must complete the performance testing for mercury in accordance with the provisions in § 63.9634(n).

(2) Use the methods specified in paragraphs (c)(1)(i) through (iv) of this section to select sampling port locations and the number of traverse points and to determine the volumetric flow rate, dry molecular weight, and moisture content of the stack gas.

(3) Determine the concentration of mercury for each stack using Method 29 or Method 30B in 40 CFR part 60, appendix A, or the voluntary consensus standard ASTM D6784–16 (incorporated by reference, see § 63.14). For Method 29 and ASTM D6784–16, the sample volume must be at least 1.7 dry standard cubic meters (dscm) (60 dry standard cubic feet) per run. For Method 30B, each test run must be at least one hour in duration.

(4) Determine the concentration of hydrogen chloride and hydrogen fluoride for each stack using Method 26A in 40 CFR part 60, appendix A. Each test must consist of three separate runs. The minimum sample volume must be at least 2 dscm per run.

(5) During each stack test run, determine the weight of taconite pellets produced and calculate the emissions rate of each pollutant in pounds of pollutant per long ton (lb/LT) of pellets produced for each test run. The weight of taconite pellets produced must be determined by measurement using weigh hoppers, belt weigh feeders, or weighed quantities in shipments, or calculated using the bulk density and volume measurements. If any measurement result for any pollutant is reported as below the method detection limit, use the method detection limit as the measured emissions level for that pollutant when calculating the emission rate. If the furnace has more than one stack, calculate the total emissions rate for each test run by summing the emissions across all stacks, as shown in Equation 4.

$$E_{f,i} = \sum_{s=1}^{n} \frac{C_s \times Q_s}{P_f} \quad (Eq. 4)$$

Where:

$E_{f,i}$ = Emissions rate for test run "i" for all emission stacks on indurating furnace "f", lb/LT of pellets produced,

C_s = Emission rate for stack "s" measured during test run "i" on indurating furnace "f", lb/dscf,

Q_s = Average volumetric flow rate of stack gas measured at stack "s" during test run "i" on indurating furnace "f", dscf/hour;

P_f = Pellets produced in indurating furnace "f" during the stack test, LT; and

n = Number of emissions stacks on furnace "f".

(6) Calculate the average emissions rate for each furnace using the three test runs, as show in Equation 5 of this section.

$$E_f = \frac{E_1 + E_2 + E_3}{3} \quad (Eq. 5)$$

Where:

E_f = Average emission rate for indurating furnace "f", lb/LT of pellets produced,

E_1 = Emissions rate for run 1 for indurating furnace "f", lb/LT of pellets produced,

E_2 = Emissions rate for run 2 for indurating furnace "f", lb/LT of pellets produced, and

E_3 = Emissions rate for run 3 for indurating furnace "f", lb/LT of pellets produced.

(7) For each indurating furnace constructed or reconstructed on or after May 15, 2023, determine compliance with the applicable mercury emission limit in table 2 to this subpart by calculating the average emissions rate from the three test runs performed on the furnace using Equations 4 and 5 of this section.

(8) For each indurating furnace constructed or reconstructed before May 15, 2023, you must determine compliance with the applicable mercury emission limit in accordance with the procedures specified in either paragraph (d)(8)(i) or (ii) of this section.

(i) Determine compliance with the mercury limit for individual furnaces in table 2 to this subpart by calculating the average mercury emissions rate for each affected indurating furnace using Equations 4 and 5 of this section, or

(ii) Determine compliance with the mercury limit for groups of indurating furnaces in table 2 to this subpart in accordance with the method in § 63.9623(d).

(9) Determine compliance with the applicable hydrogen chloride and hydrogen fluoride emission limits in table 3 to this subpart by calculating the average emissions rate for each indurating furnace for the three test runs performed on the furnace using Equations 4 and 5 of this section.

(e) For each indurating furnace using mercury CEMS to demonstrate compliance with the applicable emission limits for mercury, you must determine compliance with the applicable mercury limit in table 2 to this subpart by using a 30-day rolling average of the 1-hour arithmetic average CEMS data, including CEMS data during startup and shutdown as defined in this subpart. The mercury CEMS must be installed, calibrated, maintained, and operated as accordance with the requirements in § 63.9631(j).

§63.9622 What test methods and other procedures must I use to establish and demonstrate initial compliance with the operating limits?

(a) For wet scrubbers subject to performance testing in § 63.9620 and operating limits for pressure drop and scrubber water flow rate in § 63.9590(b)(1), you must establish site-specific operating limits according to the procedures in paragraphs (a)(1) through (3) of this section.

(1) Using the CPMS required in § 63.9631(b), measure and record the pressure drop and scrubber water flow rate every 15 minutes during each run of the particulate matter performance test.

(2) Calculate and record the average pressure drop and scrubber water flow rate for each individual test run. Your operating limits are established as the lowest average pressure drop and the lowest average scrubber water flow rate corresponding to any of the three test runs, except as specified in paragraph (g)(2) of this section.

(3) If a rod-deck venturi scrubber is applied to an indurating furnace to meet any particulate matter emission limit in table 1 to this subpart, you may establish a lower average pressure drop operating limit by using historical average pressure drop data from a certified performance test completed on or after December 18, 2002 instead of using the average pressure drop value determined during the initial performance test, as specified in paragraph (a)(2) of this section. If historical average pressure drop data are used to establish an operating limit (*i.e.,* using data from a certified performance test conducted prior to the promulgation date of the final rule), then the average particulate matter concentration corresponding to the historical performance test must be at or below the applicable indurating furnace emission limit, as listed in table 1 to this subpart.

(b) On or before January 28, 2022, for affected sources that commenced construction or reconstruction on or before September 25, 2019, for dynamic wet scrubbers subject to performance testing in § 63.9620 and operating limits for scrubber water flow rate and either fan amperage or pressure drop in § 63.9590(b)(2), you must establish site-specific operating limits according to the procedures in paragraphs (b)(1) and (2) of this section. After January 28, 2022, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, for dynamic wet scrubbers subject to performance testing in § 63.9620 and operating limits for scrubber water flow rate and fan amperage in § 63.9590(b)(2), you must establish site-specific operating limits according to the procedures in paragraphs (b)(1) and (2) of this section.

(1) On or before January 28, 2022, for affected sources that commenced construction or reconstruction on or before September 25, 2019, using the CPMS required in § 63.9631(b), measure and record the scrubber water flow rate and either the fan amperage or pressure drop every 15 minutes during each run of the particulate matter performance test. After January 28, 2022, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, using the CPMS required in § 63.9631(b), measure and record the scrubber water flow rate and the fan amperage every 15 minutes during each run of the particulate matter performance test.

(2) On or before January 28, 2022, for affected sources that commenced construction or reconstruction on or before September 25, 2019, calculate and record the average scrubber water flow rate and either the average fan amperage or the average pressure drop for each individual test run. Your operating limits are established as the lowest average scrubber water flow rate and either the lowest average fan amperage or pressure drop value corresponding to any of the three test runs. After January 28, 2022, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, calculate and record the average scrubber water flow rate and the average fan amperage for each individual test run. Your operating limits are established as the lowest average scrubber water flow rate and the lowest average fan amperage value corresponding to any of the three test runs, except as specified in paragraph (g)(2) of this section.

(c) For a dry ESP subject to performance testing in § 63.9620 and operating limits in § 63.9590(b)(3), you must establish a site-specific operating limit according to the procedures in paragraphs (c)(1) or (2) of this section.

(1) If the operating limit for your dry ESP is a 6-minute average opacity of emissions value, then you must follow the requirements in paragraphs (c)(1)(i) through (iii) of this section.

(i) Using the continuous opacity monitoring system (COMS) required in § 63.9631(d)(1), measure and record the opacity of emissions from each control device stack during the particulate matter performance test.

(ii) Compute and record the 6-minute opacity averages from 24 or more data points equally spaced over each 6-minute period (*e.g.,* at 15-second intervals) during the test runs.

(iii) Using the opacity measurements from a performance test that meets the emission limit, determine the opacity value corresponding to the 99 percent upper confidence level of a normal distribution of the 6-minute opacity averages.

(2) If the operating limit for your dry ESP is the daily average secondary voltage and daily average secondary current for each field, then you must follow the requirements in paragraphs (c)(2)(i) and (ii) of this section.

(i) Using the CPMS required in § 63.9631(d)(2), measure and record the secondary voltage and secondary current for each dry ESP field every 15 minutes during each run of the particulate matter performance test.

(ii) Calculate and record the average secondary voltage and secondary current for each dry ESP field for each individual test run. Your operating limits are established as the lowest average secondary voltage and secondary current value for each dry ESP field corresponding to any of the three test runs.

(d) For a wet ESP subject to performance testing in § 63.9620 and operating limit in § 63.9590(b)(4), you must establish a site-specific operating limit according to the procedures in paragraphs (d)(1) and (2) of this section.

(1) Using the CPMS required in § 63.9631(e), measure and record the parametric values in paragraphs (d)(1)(i) through (iii) of this section for each wet ESP field every 15 minutes during each run of the particulate matter performance test.

(i) Secondary voltage;

(ii) Water flow rate; and

(iii) Stack outlet temperature.

(2) For each individual test run, calculate and record the average value for each operating parameter in paragraphs (d)(1)(i) through (iii) of this section for each wet ESP field. Your operating limits are established as the lowest average value for each operating parameter of secondary voltage and water flow rate corresponding to any of the three test runs, and the highest average value for each stack outlet temperature corresponding to any of the three test runs.

(e) If you use an air pollution control device other than a wet scrubber, dynamic wet scrubber, dry ESP, wet ESP, or baghouse, and it is subject to performance testing in § 63.9620, you must submit a site-specific monitoring plan in accordance with § 63.9631(f). The site-specific monitoring plan must include the site-specific procedures for demonstrating initial and continuous compliance with the corresponding operating limits.

(f) You may change the operating limits for any air pollution control device as long as you meet the requirements in paragraphs (f)(1) through (3) of this section.

(1) Submit a written notification to the Administrator of your request to conduct a new performance test to revise the operating limit.

(2) Conduct a performance test to demonstrate compliance with the applicable emission limitation in table 1 to this subpart.

(3) Establish revised operating limits according to the applicable procedures in paragraphs (a) through (e) of this section.

(g) For wet scrubbers and wet ESPs subject to performance testing in § 63.9620(l) and operating limits for scrubber water flow rate and pH in § 63.9590(b)(5), you must establish site-specific operating limits according to the procedures in paragraphs (g)(1) and (2) of this section.

(1) Using the CPMS required in § 63.9631(b), measure and record the scrubber water flow rate and pH of the scrubber water effluent every 15 minutes during each run of the performance test for hydrogen chloride and hydrogen fluoride.

(2) Calculate and record the average scrubber water flow rate and average pH of the scrubber water effluent for each individual test run. Your operating limit must be established as the average scrubber water flow rate and average pH of the scrubber water of the three test runs. If a higher average flow rate is measured during the most recent PM performance test, the operating limit for the daily average scrubber water flow rate is the average scrubber water flow rate measured during the most recent PM performance test. If a higher average flow rate is measured during the most recent HCl and HF performance test, the operating limit for the daily average scrubber water flow rate is the average scrubber water flow rate measured during the most recent HCl and HF performance test.

(h) For ACI systems subject to performance testing in § 63.9620(k)(1) and operating limits for activated carbon sorbent injection rate and carrier gas flow rate in § 63.9590(b)(6), you must establish site-specific operating limits according to the procedures in paragraphs (h)(1) and (2) of this section.

(1) Using the CPMS required in § 63.9631(b), measure and record the activated carbon injection rate and carrier gas flow rate every 15 minutes during each run of the performance test for mercury.

(2) Calculate and record the average activated carbon injection rate and carrier gas flow rate for each individual test run. Your operating limit must be established as the highest activated carbon injection rate and carrier gas flow rate of the three test runs.

(i) For DSI systems subject to performance testing in § 63.9620(l) and operating limits for sorbent injection rate and carrier gas flow rate in § 63.9590(b)(7), you must establish site-specific operating limits according to the procedures in paragraphs (i)(1) and (2) of this section.

(1) Using the CPMS required in § 63.9631(b), measure and record the sorbent injection rate and carrier gas flow rate every 15 minutes during each run of the performance test for hydrogen chloride and hydrogen fluoride.

(2) Calculate and record the average sorbent injection rate and carrier gas flow rate for each individual test run. Your operating limit must be established as the highest average sorbent injection rate and carrier gas flow rate of the three test runs.

§63.9623 How do I demonstrate initial compliance with the emission limitations that apply to me?

(a) For each affected source subject to an emission limit in tables 1 through 3 to this subpart, you must demonstrate initial compliance by meeting the emission limit requirements in paragraphs (a)(1) through (8) of this section by the compliance date specified in § 63.9583.

(1) For ore crushing and handling, the flow-weighted mean concentration of particulate matter, determined according to the procedures in §§ 63.9620(a) and 63.9621(b), must not exceed the emission limits in table 1 to this subpart.

(2) For indurating furnaces, the flow-weighted mean concentration of particulate matter, determined according to the procedures in §§ 63.9620(b) and 63.9621(c), must not exceed the emission limits in table 1 to this subpart.

(3) For finished pellet handling, the flow-weighted mean concentration of particulate matter, determined according to the procedures in §§ 63.9620(c) and 63.9621(b), must not exceed the emission limits in table 1 to this subpart.

(4) For ore dryers, the flow-weighted mean concentration of particulate matter, determined according to the procedures in §§ 63.9620(d) and 63.9621(c), must not exceed the emission limits in table 1 to this subpart.

(5) For indurating furnaces not using emissions averaging, the mercury emissions determined according to the procedures in §§ 63.9620(k)(1) or (2) and 63.9621(d), must not exceed the applicable emission limit in table 2 to this subpart.

(6) For indurating furnaces that comply with the mercury emissions limit using emissions averaging, the average mercury emissions determined according to the procedures in §§ 63.9620(k)(1) or (2), 63.9621(d) and 63.9634(m), must not exceed the applicable emission limit in table 2 to this subpart.

(7) For indurating furnaces that comply with the mercury emissions limit by adjusting the activated carbon injection rate based on the taconite pellet production rate, the mercury emissions determined according to the procedures in §§ 63.9620(k)(1) or (2), 63.9621(d) or (e), and 63.9634(n), must not exceed the applicable emission limit in table 2 to this subpart.

(8) For indurating furnaces, the hydrogen chloride and hydrogen fluoride emissions determined according to the procedures in §§ 63.9620(l) and 63.9621(d), must not exceed the applicable emission limit in table 3 to this subpart.

(b) For each affected source subject to an emission limit in table 1 to this subpart, you must demonstrate initial compliance by meeting the operating limit requirements in paragraphs (b)(1) through (5) of this section.

(1) For each wet scrubber subject to performance testing in § 63.9620 and operating limits for pressure drop and scrubber water flow rate in § 63.9590(b)(1), you have established appropriate site-specific operating limits and have a record of the pressure drop and scrubber water flow rate measured during the performance test in accordance with § 63.9622(a).

(2) On or before January 28, 2022, for affected sources that commenced construction or reconstruction on or before September 25, 2019, for each dynamic wet scrubber subject to performance testing in § 63.9620 and operating limits for scrubber water flow rate and either fan amperage or pressure drop in § 63.9590(b)(2), you have established appropriate site-specific operating limits and have a record of the scrubber water flow rate and either the fan amperage or pressure drop value, measured during the performance test in accordance with § 63.9622(b). After January 28, 2022, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, for each dynamic wet scrubber subject to performance testing in § 63.9620 and operating limits for scrubber water flow rate and fan amperage in § 63.9590(b)(2), you have established appropriate site-specific operating limits and have a record of the scrubber water flow rate and the fan amperage value, measured during the performance test in accordance with § 63.9622(b).

(3) For each dry ESP subject to performance testing in § 63.9620 and one of the operating limits in § 63.9590(b)(3), you must meet the requirements in paragraph (b)(3)(i) or (ii) of this section.

(i) If you are subject to the operating limit for opacity in § 63.9590(b)(3)(i), you have established appropriate site-specific operating limits and have a record of the opacity measured during the performance test in accordance with § 63.9622(c)(1).

(ii) If you are subject to the operating limit for secondary voltage and secondary current in § 63.9590(b)(3)(ii), you have established appropriate site-specific operating limits and have a record

of the secondary voltage and secondary current measured during the performance test in accordance with § 63.9622(c)(2).

(4) For each wet ESP subject to performance testing in § 63.9620 and operating limits for secondary voltage, water flow rate, and stack outlet temperature in § 63.9590(b)(4), you have established appropriate site-specific operating limits and have a record of the secondary voltage, water flow rate, and stack outlet temperature measured during the performance test in accordance with § 63.9622(d).

(5) For other air pollution control devices subject to performance testing in § 63.9620 and operating limits in accordance with § 63.9590(b)(8), you have submitted a site-specific monitoring plan in accordance with § 63.9631(f) and have a record of the site-specific operating limits as measured during the performance test in accordance with § 63.9622(e).

(c) Except as specified in paragraph (e) of this section, you must demonstrate initial compliance with the emission limits in tables 2 and 3 to this subpart, by meeting the operating limit requirements in paragraphs (c)(1) through (3) of this section.

(1) For each wet scrubber and wet ESP subject to performance testing in § 63.9620(k) and operating limits for scrubber water flow rate and pH in § 63.9590(b)(5), you have established appropriate site-specific operating limits and have a record of the scrubber water flow rate and pH measured during the performance test in accordance with § 63.9622(g).

(2) For each ACI subject to performance testing in § 63.9620(k) and operating limits for activated carbon injection rate and carrier gas flow rate in § 63.9590(b)(6), you have established appropriate site-specific operating limits and have a record of the activated carbon injection rate and carrier gas flow rate measured during the performance test in accordance with § 63.9622(i).(3) For each DSI subject to performance testing in § 63.9620(k) and operating limits for sorbent injection rate and carrier gas flow rate in § 63.9590(b)(7), you have established appropriate site-specific operating limit and have a record of the sorbent injection rate and carrier gas flow rate measured during the performance test in accordance with § 63.9622(h).

(d) If you elect to comply with the mercury limit in table 2 to this subpart using emissions averaging for indurating furnaces constructed or reconstructed before May 15, 2023, you must comply with the requirements in paragraphs (d)(1) through (4) of this section.

(1) Before submitting the implementation plan required in paragraph (d)(3) of this section, you must complete the mercury stack testing required in § 63.9620(k)(1) or install, calibrate, and operate a mercury CEMS pursuant to § 63.9620(k)(2) and paragraph (e) of this section for all indurating furnaces you wish to include in the mercury emission average.

(2) You must develop and submit to the applicable regulatory authority for review and approval, an implementation plan for mercury emission averaging no later than 180 days before the date you intend to demonstrate compliance using the emission averaging option. You must include the information contained in paragraphs (d)(2)(i) through (iii) of this section in your implementation plan.

(i) Identification of all indurating furnaces in the averaging group, including the typical taconite pellet production rate, control technology installed, and types of fuel(s) that will be burned.

(ii) The mercury emission rate for each furnace for each of the fuels identified in paragraph (d)(2)(i) of this section.

(iii) The date on which you are requesting emission averaging to commence.

(3) The regulatory authority shall review and approve or disapprove the plan according to the following criteria:

(i) Whether the content of the plan includes all the information specified in paragraph (d)(2) of this section, and

(ii) Whether the plan presents sufficient information to determine that compliance will be achieved and maintained.

(4) The applicable regulatory authority shall not approve an emission averaging implementation plan containing any of the following provisions:

(i) Averaging that includes indurating furnaces constructed or reconstructed on or after May 15, 2023, or

(ii) Averaging between indurating furnaces located at different facilities.

(e) If you elect to demonstrate compliance with the mercury limit in table 2 to this subpart using a mercury CEMS, you must calculate the 30-day rolling average of 1-hour arithmetic average emission concentrations, including CEMS data during startup and shutdown, calculated using equation 19–19 in section 12.4.1 of EPA Reference Method 19 at appendix A–7 of 40 CFR part 60. The 1-hour arithmetic averages for CEMS must be calculated using the data points required under § 63.8(c)(4)(ii).

(f) For each emission limitation and operating limit that applies to you, you must submit a notification of compliance status according to § 63.9640(e)

§63.9624 How do I demonstrate initial compliance with the work practice standards that apply to me?

You must demonstrate initial compliance with the work practice standards by meeting the requirements in paragraphs (a) through (c) of this section.

(a) You must prepare a fugitive dust emissions control plan in accordance with the requirements in §63.9591.

(b) You must submit to the Administrator the fugitive dust emissions control plan in accordance with the requirements in §63.9591.

(c) You must implement each control practice according to the procedures specified in your fugitive dust emissions control plan.

§63.9625 How do I demonstrate initial compliance with the operation and maintenance requirements that apply to me?

For each air pollution control device subject to operating limits in §63.9590(b), you have demonstrated initial compliance with the operation and maintenance requirements if you meet all of the requirements in paragraphs (a) through (d) of this section.

(a) You have prepared the operation and maintenance plan for air pollution control devices in accordance with §63.9600(b).

(b) You have operated each air pollution control device according to the procedures in the operation and maintenance plan.

(c) You have submitted a notification of compliance status according to the requirements in §63.9640(e).

(d) You have prepared a site-specific monitoring plan in accordance with §63.9632(b).

Continuous Compliance Requirements

§63.9630 When must I conduct subsequent performance tests?

(a) You must conduct subsequent performance tests to demonstrate continued compliance with the ore crushing and handling emission limits in Table 1 to this subpart according to the schedule developed by your

permitting authority and shown in your title V permit. If a title V permit has not been issued, you must submit a testing plan and schedule, containing the information specified in paragraph (e) of this section, to the permitting authority for approval.

(b) You must conduct subsequent performance tests on all stacks associated with indurating furnaces to demonstrate continued compliance with the indurating furnace emission limits in tables 1 through 3 to this subpart according to the schedule developed by your permitting authority and shown in your title V permit, but no less frequent than twice per 5-year permit term. If a title V permit has not been issued, you must submit a testing plan and schedule, containing the information specified in paragraph (e) of this section, to the permitting authority for approval. For an indurating furnace with multiple stacks, the performance tests for all stacks must be conducted within 7 calendar days of commencement of the performance tests, to the extent practicable, and the indurating furnace and associated control device (where applicable) operating characteristics must remain representative and consistent for the duration of the stack tests. If you determine that the performance tests cannot be completed within 7 calendar days, the Administrator must be notified within 24 hours of making that determination. Performance testing for mercury is not required for furnaces using CEMS to demonstrate compliance with the mercury emission limits in table 2 to this subpart.

(c) You must conduct subsequent performance tests to demonstrate continued compliance with the finished pellet handling emission limits in Table 1 to this subpart according to the schedule developed by your permitting authority and shown in your title V permit. If a title V permit has not been issued, you must submit a testing plan and schedule, containing the information specified in paragraph (e) of this section, to the permitting authority for approval.

(d) You must conduct subsequent performance tests on all stacks associated with ore dryers to demonstrate continued compliance with the ore dryer emission limits in Table 1 to this subpart according to the schedule developed by your permitting authority and shown in your title V permit. If a title V permit has not been issued, you must submit a testing plan and schedule, containing the information specified in paragraph (e) of this section, to the permitting authority for approval. For ore dryers with multiple stacks, the performance tests for all stacks associated with an ore dryer must be conducted within a reasonable period of time, such that the ore dryer operating characteristics remain representative for the duration of the stack tests.

(e) If your plant does not have a title V permit, you must submit a testing plan for subsequent performance tests as required in paragraphs (a) through (d) of this section. This testing plan must be submitted to the Administrator on or before the compliance date that is specified in §63.9583. The testing plan must contain the information specified in paragraphs (e)(1) and (2) of this section. You must maintain a current copy of the testing plan onsite, and it must be available for inspection upon request. You must keep the plan for the life of the affected source or until the affected source is no longer subject to the requirements of this subpart.

(1) A list of all emission units.

(2) A schedule indicating when you will conduct subsequent performance tests for particulate matter, mercury, hydrogen chloride and hydrogen fluoride for each of the emission units.

§63.9631 What are my monitoring requirements?

(a) On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, for each baghouse applied to meet any particulate matter emission limit in Table 1 to this subpart, you must install, operate, and maintain a bag leak detection system to monitor the relative change in particulate matter loadings according to the requirements in §63.9632(a), and conduct inspections at their specified frequencies according to the requirements in paragraphs (a)(1) through (8) of this section. After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, for each baghouse applied to meet any particulate matter emission limit in Table 1 to this subpart, you must install, operate, and maintain a bag leak

detection system to monitor the relative change in particulate matter loadings according to the requirements in §63.9632(a), and conduct inspections at their specified frequencies according to the requirements in paragraphs (a)(1) through (6) and (8) of this section. For each baghouse applied to meet any particulate matter emission limit in Table 1 to this subpart that is not required by §63.9632(a) to be equipped with a bag leak detection system, you must conduct inspections at their specified frequencies according to the requirements in paragraphs (a)(1) through (8) of this section.

(1) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range.

(2) Confirm that dust is being removed from hoppers through weekly visual inspections or other means of ensuring the proper functioning of removal mechanisms.

(3) Check the compressed air supply of pulse-jet baghouses each day.

(4) Monitor cleaning cycles to ensure proper operation using an appropriate methodology.

(5) Check bag cleaning mechanisms for proper functioning through monthly visual inspections or equivalent means.

(6) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (kneed or bent) or lying on their sides. You do not have to make this check for shaker-type baghouses that have self-tensioning (spring-loaded) devices.

(7) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks.

(8) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.

(b) Except as provided in paragraph (c) of this section, for each wet scrubber subject to the operating limits for pressure drop and scrubber water flow rate in §63.9590(b)(1), you must install, operate, and maintain a CPMS according to the requirements in §63.9632(b) through (e) and monitor the daily average pressure drop and daily average scrubber water flow rate according to the requirements in §63.9633.

(c) On or before January 28, 2022, for affected sources that commenced construction or reconstruction on or before September 25, 2019, for each dynamic wet scrubber subject to the scrubber water flow rate and either the fan amperage or pressure drop operating limits in §63.9590(b)(2), you must install, operate, and maintain a CPMS according to the requirements in §63.9632(b) through (e) and monitor the daily average scrubber water flow rate and either the daily average fan amperage or the daily average pressure drop according to the requirements in §63.9633. After January 28, 2022, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, for each dynamic wet scrubber subject to the scrubber water flow rate and the fan amperage operating limits in §63.9590(b)(2), you must install, operate, and maintain a CPMS according to the requirements in §63.9632(b) through (e) and monitor the daily average scrubber water flow rate and the daily average fan amperage according to the requirements in §63.9633.

(d) For each dry ESP subject to the operating limits in § 63.9590(b)(3), you must follow the monitoring requirements in paragraph (d)(1) or (2) of this section.

(1) If the operating limit you choose to monitor is the 6-minute average opacity of emissions in accordance with § 63.9590(b)(3)(i), you must install, operate, and maintain a COMS according to the requirements in § 63.9632(f) and monitor the 6-minute average opacity of emissions exiting each control device stack according to the requirements in § 63.9633.

(2) If the operating limit you choose to monitor is average secondary voltage and average secondary current for each dry ESP field in accordance with § 63.9590(b)(3)(ii), you must install, operate, and maintain a CPMS according to the requirements in § 63.9632(b) through (e) and monitor the daily average secondary voltage and daily average secondary current according to the requirements in § 63.9633.

(e) For each wet ESP subject to the operating limits in § 63.9590(b)(4), you must install, operate, and maintain a CPMS according to the requirements in § 63.9632(b) through (e) and monitor the daily average secondary voltage, daily average stack outlet temperature, and daily average water flow rate according to the requirements in § 63.9633.

(f) For each wet scrubber and wet ESP subject to the operating limits in § 63.9590(b)(5), you must install, operate, and maintain a CPMS according to the requirements in § 63.9632(g) and monitor the daily average scrubber water flow rate and pH of the scrubber water effluent.

(g) For each ACI system subject to the operating limits in § 63.9590(b)(6), you must install, operate, and maintain a CPMS according to the requirements in § 63.9632(h) and (i) and monitor the daily average activated carbon injection rate and carrier gas flow rate.

(h) For each DSI system subject to the operating limits in § 63.9590(b)(7), you must install, operate, and maintain a CPMS according to the requirements in § 63.9632(h) and (i) and monitor the daily average sorbent injection rate and carrier gas flow rate.

(i) If you use any air pollution control device other than a baghouse, wet scrubber, dry ESP, wet ESP, DSI, or ACI, you must submit a site-specific monitoring plan that includes the information in paragraphs (i)(1) through (4) of this section. The monitoring plan is subject to approval by the Administrator. You must maintain a current copy of the monitoring plan onsite, and it must be available for inspection upon request. You must keep the plan for the life of the affected source or until the affected source is no longer subject to the requirements of this subpart.

(1) A description of the device.

(2) Test results collected in accordance with § 63.9621 verifying the performance of the device for reducing emissions of particulate matter, mercury, hydrogen chloride, and hydrogen fluoride to the atmosphere to the levels required by this subpart.

(3) A copy of the operation and maintenance plan required in § 63.9600(b).

(4) Appropriate operating parameters that will be monitored to maintain continuous compliance with the applicable emission limitation(s).

(j) If you elect to comply with the mercury limit in table 2 to this subpart using emissions averaging in accordance with an implementation plan approved under the provisions in § 63.9623(d) or you elect to adjust the activated carbon injection rate based on the taconite pellet production rate in accordance with the procedures in § 63.9634(n), you must determine and record the mass of taconite pellets produced each month by each furnace included in the emissions averaging group. The weight of taconite pellets produced must be determined by measurement using weigh hoppers, belt weigh feeders, or weighed quantities in shipments, or calculated using the bulk density and volume measurements.

(k) If you elect to demonstrate compliance with the mercury emissions limits in table 2 to this subpart using a CEMS to measure mercury emissions, you must comply with the requirements in (k)(1) through (5).

(1) Notify the Administrator one month before starting use of the CEMS and notify the Administrator 180-days before ceasing use of the CEMS.

(2) Each CEMS must be installed, certified, calibrated, and maintained according to the requirements of performance specifications 6 and 12A of 40 CFR part 60, appendix B, and quality assurance procedure 6 of 40 CFR part 60, appendix F.

(3) Operate the mercury CEMS in accordance with performance specification 12A of 40 CFR part 60, appendix B. The duration of the performance test must be 30 operating days. For each day in which the unit operates, you must obtain hourly mercury concentration data, and stack gas volumetric flow rate data.

(4) You must complete the initial performance evaluation of the CEMS within 180 days after notifying the Administrator and before starting to use the CEMS data in lieu of performance testing and monitoring operating parameters to demonstrate compliance.

(5) Collect CEMS hourly averages for all operating hours on a 30-day rolling average basis. The one-hour arithmetic averages, expressed in units of lb/LT, must be used to calculate 30-day rolling average emissions to determine compliance with the applicable emission limit in table 2 to this subpart.

§63.9632 What are the installation, operation, and maintenance requirements for my monitoring equipment?

(a) On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, for each negative pressure baghouse or positive pressure baghouse equipped with a stack, applied to meet any particulate emission limit in Table 1 to this subpart, you must install, operate, and maintain a bag leak detection system for each exhaust stack according to the requirements in paragraphs (a)(1) and (2) and (a)(4) through (9) of this section. After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, for each negative pressure baghouse or positive pressure baghouse equipped with a stack, applied to meet any particulate emission limit in Table 1 to this subpart, you must install, operate, and maintain a bag leak detection system for each exhaust stack according to the requirements in paragraphs (a)(1) through (9) of this section.

(1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(2) The system must provide output of relative changes in particulate matter loadings.

(3) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.

(4) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over the alarm level set point established according to paragraph (a)(5) of this section. The alarm must be located such that it can be heard by the appropriate plant personnel.

(5) For each bag leak detection system, you must develop and submit to the Administrator for approval, a site-specific monitoring plan that addresses the items identified in paragraphs (a)(5)(i) through (v) of this section. The monitoring plan shall be consistent with the manufacturer's specifications and recommendations contained in the U.S. Environmental Protection Agency (U.S. EPA) guidance document, “Fabric Filter Bag Leak Detection Guidance” (EPA-454/R-98-015) (incorporated by reference—see §63.14). You must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe all of the items in paragraphs (a)(5)(i) through (v) of this section.

(i) Installation of the bag leak detection system.

(ii) Initial and periodic adjustment of the bag leak detection system including how the alarm set-point will be established.

(iii) Operation of the bag leak detection system including quality assurance procedures.

(iv) How the bag leak detection system will be maintained including a routine maintenance schedule and spare parts inventory list.

(v) How the bag leak detection system output shall be recorded and stored.

(6) To make the initial adjustment of the system, establish the baseline output by adjusting the sensitivity (range) and the averaging period of the device. Then, establish the alarm set points and the alarm delay time (if applicable).

(7) Following initial adjustment, do not adjust sensitivity or range, averaging period, alarm set point, or alarm delay time, without approval from the Administrator except as provided for in paragraph (a)(7)(i) of this section. In no event may the sensitivity be increased more than 100 percent or decreased by more than 50 percent over a 365-day period unless such adjustment follows a complete baghouse inspection that demonstrates the baghouse is in good operating condition.

(i) Once per quarter, you may adjust the sensitivity or range of the bag leak detection system to account for seasonal effects, including temperature and humidity, according to the procedures identified in the site-specific monitoring plan required under paragraph (a)(5) of this section.

(ii) [Reserved]

(8) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(9) The bag leak detector sensor must be installed downstream of the baghouse and upstream of any wet scrubber.

(b) For each CPMS required in §63.9631, you must develop and make available for inspection upon request by the permitting authority a site-specific monitoring plan that addresses the requirements in paragraphs (b)(1) through (7) of this section.

(1) Installation of the CPMS sampling probe or other interface at a measurement location relative to each affected emission unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device).

(2) Performance and equipment specifications for the sample interface, the parametric signal analyzer, and the data collection and reduction system.

(3) On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, performance evaluation procedures and acceptance criteria (*e.g.,* calibrations). After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, performance evaluation procedures, a schedule for performing such procedures, and acceptance criteria (*e.g.,* calibrations), as well as corrective action to be taken if a performance evaluation does not meet the acceptance criteria. If a CPMS calibration fails, the CPMS is considered to be inoperative until you take corrective action and the system passes calibration.

(4) On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (3), (4)(ii), (7), and (8). After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, ongoing operation and maintenance procedures and a schedule for preventative maintenance procedures, in a manner consistent with good air pollution control practices and in accordance with the general requirements of §63.8(c)(1)(ii), (c)(3), (c)(4)(ii), and (c)(7) and (8).

(5) On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d). After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d)(1) and (2). The owner or operator shall keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the Administrator. If the performance evaluation plan is revised, the owner or operator shall keep previous (*i.e.,* superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan.

(6) On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i). After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c)(1) through (14), (e)(1), and (e)(2)(i).

(7) Corrective action procedures that you will follow in the event an air pollution control device, except for a baghouse, exceeds an established operating limit as required in §63.9600(b)(3).

(c) Unless otherwise specified, each CPMS must meet the requirements in paragraphs (c)(1) and (2) of this section.

(1) Each CPMS must complete a minimum of one cycle of operation for each successive 15-minute period and must have valid data for at least 95 percent of every daily averaging period.

(2) Each CPMS must determine and record the daily average of all recorded readings.

(d) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

(e) You must operate and maintain the CPMS in continuous operation according to the site-specific monitoring plan.

(f) For each dry ESP subject to the opacity operating limit in § 63.9590(b)(3)(i), you must install, operate, and maintain each COMS according to the requirements in paragraphs (f)(1) through (4) of this section.

(2) On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, you must develop and implement a quality control program for operating and maintaining each COMS according to § 63.8. At a minimum, the quality control program must include a daily calibration drift assessment, quarterly performance audit, and annual zero alignment of each COMS. After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, you must develop and implement a quality control program for operating and maintaining each COMS according to § 63.8(a) and (b), (c)(1)(ii), (c)(2) through (8), (d)(1) and (2), and (e) through (g) and Procedure 3 in appendix F to 40 CFR part 60. At a minimum, the quality control program must include a daily calibration drift assessment, quarterly performance audit, and annual zero alignment of each COMS.

(3) You must operate and maintain each COMS according to §63.8(e) and your quality control program. You must also identify periods the COMS is out of control, including any periods that the COMS fails to pass a daily calibration drift assessment, quarterly performance audit, or annual zero alignment audit.

(4) On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, you must determine and record the 6-minute average opacity for periods during which the COMS is not out of control. After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, you must determine and record the 6-minute average opacity for periods during which the COMS is not out of control. All COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(g) For each pH measurement device, in addition to the requirements in paragraphs (b) through (e) of this section, you must meet the requirements in paragraphs (g)(1) through (4) of this section.

(1) The minimum accuracy of the pH measurement device must be ±0.2 pH units.

(2) Locate the pH sensor in a position that provides a representative measurement of scrubber effluent pH.

(3) Ensure the sample is properly mixed and representative of the fluid to be measured.

(4) Check the pH meter's calibration on at least two points every 8 hours of process operation.

(h) For each mass flow rate monitor used for measuring the sorbent or activated carbon injection rate, in addition to the requirements in paragraphs (b) through (e) of this section, you must meet the requirements of (h)(1) through (4) of this section.

(1) The minimum accuracy of the mass flow rate monitor must be ±5 percent over the normal range of flow measured.

(2) Locate the device in a position(s) that provides a representative measurement of the total sorbent injection rate.

(3) Install and calibrate the device in accordance with manufacturer's procedures and specifications.

(4) At least annually, conduct a performance evaluation of the injection rate monitoring system in accordance with your monitoring plan.

(i) For each carrier gas flow rate monitor, in addition to the requirements in paragraphs (b) through (e) of this section, you must meet the requirements of (i)(1) through (4) of this section.

(1) The minimum accuracy of the gas flow rate monitor must be ±5 percent over the normal range of flow measured or 280 liters per minute (10 cubic feet per minute), whichever is greater.

(2) Locate the device in a position(s) that provides a representative measurement of the carrier gas flow rate.

(3) Install and calibrate the device in accordance with manufacturer's procedures and specifications.

(4) At least annually, conduct a performance evaluation of the carrier gas flow rate monitoring system in accordance with your monitoring plan.

§63.9633 How do I monitor and collect data to demonstrate continuous compliance?

(a) Except for monitoring malfunctions, out of control periods, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span

adjustments), you must monitor continuously (or collect data at all required intervals) at all times an affected source is operating.

(b) You may not use data recorded during monitoring malfunctions, out of control periods, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels, or to fulfill a minimum data availability requirement. You must use all the data collected during all other periods in assessing compliance.

(c) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not considered malfunctions.

§63.9634 How do I demonstrate continuous compliance with the emission limitations that apply to me?

(a) For each affected source subject to an emission limit in Table 1 to this subpart, you must demonstrate continuous compliance by meeting the requirements in paragraphs (b) through (f) of this section.

(b) For ore crushing and handling affected sources and finished pellet handling affected sources, you must demonstrate continuous compliance by meeting the requirements in paragraphs (b)(1) through (3) of this section.

(1) The flow-weighted mean concentration of particulate matter for all ore crushing and handling emission units and for all finished pellet handling emission units must be maintained at or below the emission limits in Table 1 to this subpart.

(2) You must conduct subsequent performance tests for emission units in the ore crushing and handling and finished pellet handling affected sources following the schedule in your title V permit. If a title V permit has not been issued, you must conduct subsequent performance tests according to a testing plan approved by the Administrator or delegated authority.

(3) For ore crushing and handling and finished pellet handling emission units not selected for initial performance testing and defined within a group of similar emission units in accordance with §63.9620(e), the site-specific operating limits established for the emission unit selected as representative of a group of similar emission units will be used as the operating limit for each emission unit within the group. The operating limit established for the representative unit must be met by each emission unit within the group.

(c) For ore dryers and indurating furnaces, you must demonstrate continuous compliance by meeting the requirements in paragraphs (c)(1) and (2) of this section.

(1) The flow-weighted mean concentration of particulate matter for all stacks from the ore dryer or indurating furnace must be maintained at or below the emission limits in Table 1 to this subpart.

(2) For ore dryers, you must conduct subsequent performance tests following the schedule in your title V permit. For indurating furnaces, you must conduct subsequent performance tests following the schedule in your title V permit, but no less frequent than twice per 5-year permit term. If a title V permit has not been issued, you must conduct subsequent performance tests according to a testing plan approved by the Administrator or delegated authority.

(d) On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, for each baghouse applied to meet any particulate emission limit in Table 1 to this subpart, you must demonstrate continuous compliance by completing the requirements in paragraphs (d)(1) and (2) of this section. After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, for each baghouse applied to meet any particulate emission limit in Table 1 to this subpart, you must demonstrate continuous compliance by completing the requirements in paragraphs (d)(1) through (3) of this section.

(1) Maintaining records of the time you initiated corrective action in the event of a bag leak detection system alarm, the corrective action(s) taken, and the date on which corrective action was completed.

(2) Inspecting and maintaining each baghouse according to the requirements in §63.9631(a) and recording all information needed to document conformance with the requirements in §63.9631(a). If you increase or decrease the sensitivity of the bag leak detection system beyond the limits specified in your site-specific monitoring plan, you must include a copy of the required written certification by a responsible official in the next semiannual compliance report.

(3) Each bag leak detection system must be operated and maintained such that the alarm does not sound more than 5 percent of the operating time during a 6-month period. Calculate the alarm time as specified in paragraphs (d)(3)(i) through (iii) of this section.

(i) If inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted.

(ii) If corrective action is required, each alarm time (*i.e.,* time that the alarm sounds) is counted as a minimum of 1 hour.

(iii) If it takes longer than 1 hour to initiate corrective action, each alarm time is counted as the actual amount of time taken to initiate corrective action.

(e) Except as provided in paragraph (f) of this section, for each wet scrubber subject to the operating limits for pressure drop and scrubber water flow rate in §63.9590(b)(1), you must demonstrate continuous compliance by completing the requirements of paragraphs (e)(1) through (4) of this section.

(1) Maintaining the daily average pressure drop and daily average scrubber water flow rate at or above the minimum levels established during the initial or subsequent performance test.

(2) Operating and maintaining each wet scrubber CPMS according to §63.9632(b) and recording all information needed to document conformance with these requirements.

(3) Collecting and reducing monitoring data for pressure drop and scrubber water flow rate according to §63.9632(c) and recording all information needed to document conformance with these requirements.

(4) If the daily average pressure drop or daily average scrubber water flow rate is below the operating limits established for a corresponding emission unit or group of similar emission units, you must then follow the corrective action procedures in paragraph (l) of this section.

(f) On or before January 28, 2022, for affected sources that commenced construction or reconstruction on or before September 25, 2019, for each dynamic wet scrubber subject to the operating limits for scrubber water flow rate and either the fan amperage or pressure drop in §63.9590(b)(2), you must demonstrate continuous compliance by completing the requirements of paragraphs (f)(1) through (4) of this section. After January 28, 2022, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, for each dynamic wet scrubber subject to the operating limits for scrubber water flow rate and the fan amperage in §63.9590(b)(2), you must demonstrate continuous compliance by completing the requirements of paragraphs (f)(1) through (4) of this section.

(1) On or before January 28, 2022, for affected sources that commenced construction or reconstruction on or before September 25, 2019, maintaining the daily average scrubber water flow rate and either the daily average fan amperage or the daily average pressure drop at or above the minimum levels established during the initial or subsequent performance test. After January 28, 2022, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after

September 25, 2019, maintaining the daily average scrubber water flow rate and the daily average fan amperage at or above the minimum levels established during the initial or subsequent performance test.

(2) Operating and maintaining each dynamic wet scrubber CPMS according to §63.9632(b) and recording all information needed to document conformance with these requirements.

(3) On or before January 28, 2022, for affected sources that commenced construction or reconstruction on or before September 25, 2019, collecting and reducing monitoring data for scrubber water flow rate and either fan amperage or pressure drop according to §63.9632(c) and recording all information needed to document conformance with the requirements in §63.9632(c). After January 28, 2022, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, collecting and reducing monitoring data for scrubber water flow rate and fan amperage according to §63.9632(c) and recording all information needed to document conformance with the requirements in §63.9632(c).

(4) On or before January 28, 2022, for affected sources that commenced construction or reconstruction on or before September 25, 2019, if the daily average scrubber water flow rate, daily average fan amperage, or daily average pressure drop is below the operating limits established for a corresponding emission unit or group of similar emission units, you must then follow the corrective action procedures in paragraph (l) of this section. After January 28, 2022, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, if the daily average scrubber water flow rate or daily average fan amperage, is below the operating limits established for a corresponding emission unit or group of similar emission units, you must then follow the corrective action procedures in paragraph (l) of this section.

(g) For each dry ESP subject to operating limits in § 63.9590(b)(3), you must demonstrate continuous compliance by completing the requirements of paragraph (g)(1) or (2) of this section.

(1) If the operating limit for your dry ESP is a 6-minute average opacity of emissions value, then you must follow the requirements in paragraphs (g)(1)(i) through (iii) of this section.

(i) average opacity of emissions is above the operating limits established for a corresponding emission unit, you must then follow the corrective action procedures in paragraph (l) of this section.

(2) If the operating limit for your dry ESP is the daily average secondary voltage and daily average secondary current for each field, then you must follow the requirements in paragraphs (g)(2)(i) through (iv) of this section.

(i) Maintaining the daily average secondary voltage or daily average secondary current for each field at or above the minimum levels established during the initial or subsequent performance test.

(ii) Operating and maintaining each dry ESP CPMS according to § 63.9632(b) and recording all information needed to document conformance with these requirements.

(iii) Collecting and reducing monitoring data for secondary voltage or secondary current for each field according to § 63.9632(c) and recording all information needed to document conformance with these requirements.

(iv) If the daily average secondary voltage or daily average secondary current for each field is below the operating limits established for a corresponding emission unit, you must then follow the corrective action procedures in paragraph (l) of this section.

(h) For each wet ESP subject to the operating limits for secondary voltage, stack outlet temperature, and water flow rate in § 63.9590(b)(4), you must demonstrate continuous compliance by completing the requirements of paragraphs (h)(1) through (4) of this section.

(1) Maintaining the daily average secondary voltage and daily average scrubber water flow rate for each field at or above the minimum levels established during the initial or subsequent performance test. Maintaining the daily average stack outlet temperature at or below the maximum levels established during the initial or subsequent performance test.

(2) Operating and maintaining each wet ESP CPMS according to § 63.9632(b) and recording all information needed to document conformance with these requirements.

(3) Collecting and reducing monitoring data for secondary voltage, stack outlet temperature, and water flow rate according to § 63.9632(c) and recording all information needed to document conformance with these requirements.

(4) If the daily average secondary voltage, stack outlet temperature, or water flow rate does not meet the operating limits established for a corresponding emission unit, you must then follow the corrective action procedures in paragraph (l) of this section.

(i) For each affected indurating furnace subject to a hydrogen chloride and hydrogen fluoride emission limit in table 3 to this subpart, you must demonstrate continuous compliance by meeting the requirements in paragraphs (i)(1) and (2) of this section.

(1) For each wet scrubber and wet ESP subject to the operating limits for scrubber water flow rate and pH in § 63.9590(b)(5), you must demonstrate continuous compliance by completing the requirements of paragraphs (i)(1)(i) through (iv) of this section.

(i) Maintaining the daily average scrubber water flow rate and daily average pH of the scrubber water effluent at or above the minimum level established during the most recent performance test. If a higher average flow rate is measured during the last PM performance test, the operating limit for daily average scrubber water flow rate is the highest average scrubber water flow rate measured during the last PM performance test.

(ii) Operating and maintaining each of the CPMS used to measure scrubber water flow rate and pH according to § 63.9632(g) and recording all information needed to document conformance with these requirements.

(iii) Collecting and reducing monitoring data for scrubber water flow rate and pH according to § 63.9632(c) and recording all information needed to document conformance with these requirements.

(iv) If the daily average scrubber water flow rate or daily average pH is below the operating limits established for control device, you must follow the corrective action procedures in paragraph (l) of this section.

(2) For each DSI subject to the operating limits for sorbent injection rate and carrier gas flow rate in § 63.9590(b)(7), you must demonstrate continuous compliance by completing the requirements of paragraphs (i)(2)(i) through (iv) of this section.

(i) Maintain the daily average sorbent injection rate and carrier gas flow rate at or above the minimum level established during the most recent performance test.

(ii) Operate and maintain each CPMS used to measure the sorbent injection rate according to § 63.9632(h) and the carrier gas flow rate according to § 63.9632(i) and recording all information needed to document compliance with these requirements.

(iii) Collect and reduce monitoring data for the sorbent injection rate and carrier gas flow rate according to § 63.9632(c) and recording all information needed to document compliance with these requirements.

(iv) If the daily average the sorbent injection rate or carrier gas flow rate is below the operating limit established for the control device, you must follow the corrective action procedures in paragraph (l) of this section.

(j) For each affected indurating furnace using ACI to comply with the mercury emission limit in table 2 to this subpart, you must demonstrate continuous compliance by meeting the requirements of paragraphs (j)(1) or (2) of this section.

(1) If you use CEMS to demonstrate compliance, you must comply with the requirements in paragraphs (j)(1)(i) and (ii) of this section.

(i) You must operate a mercury CEMS in accordance with performance specification 12A at 40 CFR part 60, appendix B; these monitoring systems must be quality assured according to procedure 5 of 40 CFR 60, appendix F. You must demonstrate compliance with the mercury emissions limit using a 30-day rolling average of these 1-hour mercury concentrations or mass emissions rates, including CEMS data during startup and shutdown as defined in this subpart, calculated using equation 19–19 in section 12.4.1 of EPA Reference Method 19 at 40 CFR part 60, appendix A–7 of this part.

(ii) Owners or operators using a mercury CEMS to determine mass emission rate must install, operate, calibrate and maintain an instrument for continuously measuring and recording the mercury mass emissions rate to the atmosphere according to the requirements of performance specification 6 at 40 CFR part 60, appendix B and conducting an annual relative accuracy test of the continuous emission rate monitoring system according to section 8.2 of performance specification 6.

(2) If you do not use CEMS to demonstrate compliance, you must demonstrate continuous compliance by meeting the requirements of paragraphs (j)(2)(i) through (iv) of this section.

(i) Maintain the daily average activated carbon injection rate and carrier gas flow rate at or above the minimum level established during the most recent performance test.

(ii) Operate and maintain each CPMS used to measure the activated carbon injection rate according to § 63.9632(h) and the carrier gas flow rate according to § 63.9632(i), and record all information needed to document compliance with these requirements.

(iii) Collect and reduce monitoring data for the activated carbon injection rate and carrier gas flow rate according to § 63.9632(c) and record all information needed to document conformance with these requirements.

(iv) If the daily average of the activated carbon injection rate or carrier gas flow rate is below the operating limit established for the control device, you must follow the corrective action procedures in paragraph (l) of this section.

(k) If you use an air pollution control device other than a wet scrubber, dynamic wet scrubber, dry ESP, wet ESP, DSI, ACI, or baghouse, you must submit a site-specific monitoring plan in accordance with § 63.9631(f). The site-specific monitoring plan must include the site-specific procedures for demonstrating initial and continuous compliance with the corresponding operating limits.

(l) If the daily average operating parameter value for an emission unit or group of similar emission units does not meet the corresponding established operating limit, you must then follow the procedures in paragraphs (l)(1) through (4) of this section.

(1) You must initiate and complete initial corrective action within 10 calendar days and demonstrate that the initial corrective action was successful. During any period of corrective action, you must continue to monitor, and record all required operating parameters for equipment that remains in operation. After the initial corrective action, if the daily average operating parameter value for the emission unit or group of similar emission units meets the operating limit established for the corresponding unit or group, then the corrective action was successful and the emission unit or group of similar emission units is in compliance with the established operating limits.

(2) If the initial corrective action required in paragraph (l)(1) of this section was not successful, then you must complete additional corrective action within 10 calendar days and demonstrate that the subsequent corrective action was successful. During any period of corrective action, you must continue to monitor, and record all required operating parameters for equipment that remains in operation. If the daily average operating parameter value for the emission unit or group of similar emission units meets the operating limit established for the corresponding unit or group, then the corrective action was successful, and the emission unit or group of similar emission units is in compliance with the established operating limits.

(3) If the second attempt at corrective action required in paragraph (l)(2) of this section was not successful, then you must repeat the procedures of paragraph (l)(2) of this section until the corrective action is successful. If the third attempt at corrective action is unsuccessful, you must conduct another performance test in accordance with the procedures in § 63.9622(f) and report to the Administrator as a deviation the third unsuccessful attempt at corrective action.

(4) After the third unsuccessful attempt at corrective action, you must submit to the Administrator the written report required in paragraph (l)(3) of this section within 5 calendar days after the third unsuccessful attempt at corrective action. This report must notify the Administrator that a deviation has occurred and document the types of corrective measures taken to address the problem that resulted in the deviation of established operating parameters and the resulting operating limits.

(m) If you elect to comply with the mercury limit in table 2 to this subpart using emissions averaging in accordance with an implementation plan approved under the provisions in § 63.9623(d), you must comply with the requirements in paragraphs (m)(1) through (5) of this section.

(1) For furnaces included in the emissions averaging group that do not use mercury CEMS, you must comply with the requirements in paragraph (m)(1)(i) or (ii) as applicable.

(i) For furnaces equipped with ACI systems, you must comply with the requirements in paragraph (j) of this section.

(ii) For furnaces equipped with a mercury control device or method other than ACI, you must comply with your site-specific monitoring plan in accordance with the requirements in paragraph (k) of this section.

(2) For furnaces included in the emissions averaging group that use mercury CEMS, you must comply with the requirements in paragraph (i)(1) of this section.

(3) Calculate the monthly production-weighted average emission rate using either the mercury CEMS data or mercury emission rate determined during the last performance test and the actual taconite pellet production data for each furnace included in the emissions averaging option, as shown in Equation 6 of this section.

$$E_g = \frac{\sum_{f=1}^{n}(E_f \times P_f)}{\sum_{f=1}^{n} P_f} \quad (Eq. 6)$$

Where:

E_g = Monthly production-weighted average mercury emission rate for month "g" for the group of indurating furnaces, lb/LT of pellets produced,

E_f = Average mercury emission rate for furnace "f", as determined using either mercury CEMS data or the emission rate determined during the last compliance stack test and calculated using Equation 5 of § 63.9621(d)(7)(i), lb/LT of pellets produced,

P_f = Total monthly production of finished taconite pellets for furnace "f", in LT, and

n = Number of furnaces in the averaging group.

(4) Until 12 monthly weighted average emission rates have been accumulated, the monthly weighted average emissions rate, calculated as shown in paragraph (m)(3) of this section, must not exceed the mercury emission limit in table 3 of this subpart in any calendar month.

(5) After 12 monthly weighted average emission rates have been accumulated, for each subsequent calendar month, you must use Equation 7 of this section to calculate the 12-month rolling average of the monthly weighted average emission rates for the current month and the previous 11 months. The 12-month rolling weighted average emissions rate for the furnaces included in the group must not exceed the mercury emission limit in table 3 of this subpart.

$$E_{avg} = \frac{\sum_{i=1}^{12} E_i}{12} \quad Eq.7$$

Where:

E_{avg} = 12-month rolling average emission rate, lb/LT.

E_i = Monthly weighted average for month "i" calculated as shown in Equation 6 of this section.

(n) You may elect to demonstrate continuous compliance with the mercury limit in table 2 to this subpart by adjusting the activated carbon injection rate based on the taconite pellet production rate. You must comply with the requirements in paragraphs (n)(1) through (7) of this section.

(1) Measure the activated carbon injection and mercury emissions rate at a minimum of three different production levels corresponding to the maximum, minimum and median finished taconite pellet production rates, using the methods specified in § 63.9620(k).

(2) Develop a correlation curve by plotting the production rate and corresponding carbon injection rate for the maximum, median and minimum production rates. Use only data where the mercury emission rate is below the applicable mercury emissions standard in table 2 to this subpart. Plot the production rates as the independent (or x) variable and the activated carbon injection rate as the dependent (or y) variable for each pellet production rate. Construct the graph by drawing straight line segments between each point plotted.

(3) You must develop and submit to the applicable regulatory authority for review and approval, an implementation plan no later than 180 days before the date you intend to demonstrate compliance by adjusting the activated carbon injection rate based on the taconite pellet production. You must include the information listed in paragraphs (n)(3)(i) through (iv) of this section in your implementation plan.

(i) Identification of the indurating furnace, including the typical maximum and minimum taconite pellet production rate, mercury control technology installed, and types of fuel(s) that will be burned.

(ii) The mercury emissions and activated carbon injection rates at maximum, median and minimum taconite pellet production rates, and the methods used to measure the mercury emissions, activated carbon injection rate and taconite pellet production.

(iii) The correlation curve developed in paragraph (n)(2) of this section.

(iv) The date on which you are requesting to commence adjusting the activated carbon rate based on the taconite production rate.

(4) Install, calibrate, maintain, and operate a CPMS to monitor and record the activated carbon injection rate and taconite pellet production rate.

(5) Maintain the carbon injection rate at or above the rate established by the correlation curve corresponding to the taconite pellet production rate. If the taconite pellet production rate drops below the minimum rate established in paragraph (n)(3) of this section, you must maintain the activated carbon injection rate at or above the rate established for the minimum taconite pellet production rate.

(6) Keep records of the activated carbon injection rate and taconite pellet production rate for each hour of operation in order to demonstrate that the activated carbon injection rate remains in compliance with paragraph (n)(5) of this section.

(7) Establish a new correlation curve at least twice per 5-year permit term.

§63.9635 How do I demonstrate continuous compliance with the work practice standards that apply to me?

(a) You must demonstrate continuous compliance with the work practice standard requirements in §63.9591 by operating in accordance with your fugitive dust emissions control plan at all times.

(b) You must maintain a current copy of the fugitive dust emissions control plan required in §63.9591 onsite and it must be available for inspection upon request. You must keep the plan for the life of the affected source or until the affected source is no longer subject to the requirements of this subpart.

§63.9636 How do I demonstrate continuous compliance with the operation and maintenance requirements that apply to me?

(a) For each control device used to comply with an emission standard in § 63.9590(a), you must demonstrate continuous compliance with the operation and maintenance requirements in § 63.9600(b) by completing the requirements of paragraphs (a)(1) through (4) of this section.

(1) Performing preventative maintenance for each control device in accordance with §63.9600(b)(1) and recording all information needed to document conformance with these requirements;

(2) Initiating and completing corrective action for a bag leak detection system alarm in accordance with §63.9600(b)(2) and recording all information needed to document conformance with these requirements;

(3) Initiating and completing corrective action for a CPMS when you exceed an established operating limit for an air pollution control device except for a baghouse in accordance with §63.9600(b)(3) and recording all information needed to document conformance with these requirements; and

(4) Implementing and maintaining site-specific good combustion practices for each indurating furnace in accordance with §63.9600(b)(4) and recording all information needed to document conformance with these requirements.

(b) You must maintain a current copy of the operation and maintenance plan required in §63.9600(b) onsite, and it must be available for inspection upon request. You must keep the plan for the life of the affected source or until the affected source is no longer subject to the requirements of this subpart.

§63.9637 What other requirements must I meet to demonstrate continuous compliance?

(a) *Deviations.* You must report each instance in which you did not meet each emission limitation in tables 1 through 3 to this subpart that applies to you. You also must report each instance in which you did not meet the work practice standards in § 63.9591 and each instance in which you did not meet each operation and maintenance requirement in § 63.9600 that applies to you. These instances are deviations from the emission

limitations, work practice standards, and operation and maintenance requirements in this subpart. These deviations must be reported in accordance with the requirements in § 63.9641.

(b) *Startups, shutdowns, and malfunctions.* For existing sources and for new or reconstructed sources which commenced construction or reconstruction on or before September 25, 2019, on or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with §63.6(e)(1). The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e). After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, the exemptions for periods of startup, shutdown, and malfunction in §63.6(e) no longer apply.

Notifications, Reports, and Records

§63.9640 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (h) that apply to you by the specified dates.

(b) As specified in §63.9(b)(2), if you start up your affected source before October 30, 2003, you must submit your initial notification no later than 120 calendar days after October 30, 2003, or no later than 120 days after the source becomes subject to this subpart, whichever is later.

(c) As specified in §63.9(b)(3), if you start up your new affected source on or after October 30, 2003, you must submit your initial notification no later than 120 calendar days after you become subject to this subpart.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, as required in §63.7(b)(1).

(e) If you are required to conduct a performance test or other initial compliance demonstration, you must submit a notification of compliance status according to §63.9(h)(2)(ii). The initial notification of compliance status must be submitted by the dates specified in paragraphs (e)(1) and (2) of this section.

(1) For each initial compliance demonstration that does not include a performance test, you must submit the notification of compliance status before the close of business on the 30th calendar day following completion of the initial compliance demonstration.

(2) On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, for each initial compliance demonstration that does include a performance test, you must submit the notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to §63.10(d)(2). After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, for each initial compliance demonstration that does include a performance test, you must submit the notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to §63.10(d)(2). If the performance test results have been submitted electronically in accordance with §63.9641(f), the process unit(s) tested, the pollutant(s) tested, and the date that such performance test was conducted may be submitted in the

notification of compliance status report in lieu of the performance test results. The performance test results must be submitted to the Compliance and Emissions Data Reporting Interface (CEDRI) by the date the notification of compliance status report is submitted.

(f) If you elect to use CEMS to demonstrate compliance with the mercury standards in table 2 to this subpart, you must submit a notification of intent to use CEMS at least one month prior to making the change. If you are currently using CEMS to demonstrate compliance with the mercury standards, you must submit a notification of intent to cease using CEMS to demonstrate compliance at least 180 days prior to making the change.

(g) If you elect to use the mercury emissions averaging compliance option, you must submit a notification of intent at least 180 days prior to making the change. If you are currently using the mercury emissions averaging compliance option, you must submit a notification of intent to cease using emissions averaging at least 30 days prior to making the change.

§63.9641 What reports must I submit and when?

(a) *Compliance report due dates.* Unless the Administrator has approved a different schedule, you must submit a semiannual compliance report to your permitting authority according to the requirements in paragraphs (a)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.9583 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your source in §63.9583.

(2) On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, the first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after your first compliance report is due. After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, the first compliance report must be electronically submitted, postmarked or delivered no later than July 31 or January 31, whichever date comes first after your first compliance report is due.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period. After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, each subsequent compliance report must be electronically submitted, postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (a)(1) through (4) of this section.

(b) *Compliance report contents.* Each compliance report must include the information in paragraphs (b)(1) through (8) of this section, as applicable.

(1) Company name and address.

(2) On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, statement by a responsible official, with the official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, statement by a responsible official, with the official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. If your report is submitted via CEDRI, the certifier's electronic signature during the submission process replaces the requirement in this paragraph (b)(2).

(3) On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, date of report and beginning and ending dates of the reporting period. After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, date of report and beginning and ending dates of the reporting period. You are no longer required to provide the date of report when the report is submitted via CEDRI.

(4) On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, if you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i). A startup, shutdown, and malfunction plan and the information in §63.10(d)(5)(i) is not required after January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and is not required after July 28, 2020, for affected sources that commenced construction or reconstruction after September 25, 2019.

(5) If there were no deviations from the continuous compliance requirements in §§63.9634 through 63.9636 that apply to you, then provide a statement that there were no deviations from the emission limitations, work practice standards, or operation and maintenance requirements during the reporting period.

(6) If there were no periods during which a continuous monitoring system (including a CPMS, COMS, or CEMS) was out-of-control as specified in § 63.8(c)(7), then provide a statement that there were no periods during which a continuous monitoring system was out-of-control during the reporting period.

(7) On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, for each deviation from an emission limitation in Table 1 to this subpart that occurs at an affected source where you are not using a continuous monitoring system (including a CPMS or COMS) to comply with an emission limitation in this subpart, the compliance report must contain the information in paragraphs (b)(1) through (4) of this section and the information in paragraphs (b)(7)(i) and (ii) of this section. This includes periods of startup, shutdown, and malfunction. After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, for each deviation from an emission limitation in Table 1 to this subpart that occurs at an affected source where you are not using a continuous monitoring system (including a CPMS or COMS) to comply with an emission limitation in this subpart, the compliance report must contain the information in paragraphs (b)(7)(i) and (ii) of this section.

(i) The total operating time in hours of each affected source during the reporting period.

(ii) On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, information on the number, duration, and cause of deviation (including unknown cause) as applicable, and the corrective action taken. After January 25, 2021, for affected sources that commenced construction or reconstruction on or before

September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, information on the affected sources or equipment, the emission limit deviated from, the start date, start time, duration in hours, and cause of each deviation (including unknown cause) as applicable, an estimate of the quantity in pounds of each regulated pollutant emitted over an emission limit and a description of the method used to estimate the emissions, and the corrective action taken.

(8) On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, for each deviation from an emission limitation occurring at an affected source where you are using a continuous monitoring system (including a CPMS or COMS) to comply with the emission limitation in this subpart, you must include the information in paragraphs (b)(1) through (4) of this section and the information in paragraphs (b)(8)(i) through (xi) of this section. This includes periods of startup, shutdown, and malfunction. After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, for each deviation from an emission limitation occurring at an affected source where you are using a continuous monitoring system (including a CPMS, COMS, or CEMS) to comply with the emission limitation in this subpart, you must include the information in paragraphs (b)(1) through (4) of this section and the information in paragraphs (b)(8)(i) through (xi) of this section.

(i) The date and time that each malfunction started and stopped.

(ii) The start date, start time, and duration in hours (or minutes for COMS) that each continuous monitoring system was inoperative, except for zero (low-level) and high-level checks.

(iii) The start date, start time, and duration that each continuous monitoring system was out-of-control, including the information in § 63.8(c)(8).

(iv) On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, for each affected source or equipment, the date and time that each deviation started and stopped, the cause of the deviation, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period. After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, for each affected source or equipment, the date and time that each deviation started and stopped, the cause of the deviation, and whether each deviation occurred during a period of malfunction or during another period

(v) The total duration of all deviations for each Continuous Monitoring System (CMS) during the reporting period, the total operating time in hours of the affected source during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

(vi) On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, a breakdown of the total duration of the deviations during the reporting period including those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes. After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, a breakdown of the total duration of the deviations during the reporting period including those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(vii) The total duration of continuous monitoring system downtime for each continuous monitoring system during the reporting period, the total operating time in hours of the affected source during the reporting period, and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.

(viii) A brief description of the process units.

(ix) The monitoring equipment manufacturer and model number and the pollutant or parameter monitored.

(x) The date of the latest continuous monitoring system certification or audit.

(xi) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.

(c) *Submitting compliance reports electronically.* Beginning on January 25, 2021, submit all subsequent compliance reports to the EPA via CEDRI, which can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). The EPA will make all the information submitted through CEDRI available to the public without further notice to you. Do not use CEDRI to submit information you claim as confidential business information (CBI). Anything submitted using CEDRI cannot later be claimed to be CBI. You must use the appropriate electronic report template on the CEDRI website (*https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri*) for this subpart. The report must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted. Although we do not expect persons to assert a claim of CBI, if persons wish to assert a CBI claim, submit a complete report, including information claimed to be CBI, to the EPA. The report must be generated using the appropriate form on the CEDRI website. Clearly mark the part or all of the information that you claim to be CBI. Information not marked as CBI may be authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. Submit the file following the procedures in paragraph (c)(1) or (2) of this section. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph (c). All CBI claims must be asserted at the time of submission. Furthermore, under CAA section 114(c) emissions data is not entitled to confidential treatment, and EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available. On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, if you had a startup, shutdown, or malfunction during the reporting period that is not consistent with your startup, shutdown, and malfunction plan you must submit an immediate startup, shutdown and malfunction report according to the requirements in § 63.10(d)(5)(ii). After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, an immediate startup, shutdown, and malfunction report is not required.

(1) The preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol, or other online file sharing services. Electronic submissions must be transmitted directly to the OAQPS CBI Office at the email address *oaqpscbi@epa.gov,* and as described above, should include clear CBI markings and be flagged to the attention of the Taconite Iron Ore Processing Sector Lead. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if you do not have your own file sharing service, please email *oaqpscbi@epa.gov* to request a file transfer link.

(2) If you cannot transmit the file electronically, you may send CBI information through the postal service to the following address: U.S. EPA, Attn: OAQPS Document Control Officer and Taconite Iron Ore Processing Sector Lead, Mail Drop: C404–02, 109 T.W. Alexander Drive, P.O. Box 12055, RTP, NC 27711. The mailed CBI

material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope.

(d) *Part 70 monitoring report.* If you have obtained a title V operating permit for an affected source pursuant to 40 CFR part 70 or 40 CFR part 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report for an affected source along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emission limitation or operation and maintenance requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements for an affected source to your permitting authority.

(e) *Immediate corrective action report.* If you had three unsuccessful attempts of applying corrective action as described in § 63.9634(l) on an emission unit or group of emission units, then you must submit an immediate corrective action report. Within 5 calendar days after the third unsuccessful attempt at corrective action, you must submit to the Administrator a written report in accordance with § 63.9634(l)(3) and (4). This report must notify the Administrator that a deviation has occurred and document the types of corrective measures taken to address the problem that resulted in the deviation of established operating parameters and the resulting operating limits.

(f) *Performance tests.* After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, within 60 days after the date of completing each performance test required by this subpart, you must submit the results of the performance test following the procedures specified in paragraphs (f)(1) through (3) of this section.

(1) *Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert) at the time of the test.* Submit the results of the performance test to the EPA via CEDRI, which can be accessed through the EPA's CDX (*https://cdx.epa.gov/*). The data must be submitted in a file format generated through the use of the EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.

(2) *Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test.* The results of the performance test must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI.

(3) *Confidential business information (CBI).*

(i) The EPA will make all the information submitted through CEDRI available to the public without further notice to you. Do not use CEDRI to submit information you claim as CBI. Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim for some of the information submitted under paragraph (f)(1) or (2) of this section, you must submit a complete file, including information claimed to be CBI, to the EPA.

(ii) The file must be generated using the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website.

(iii) Clearly mark the part or all of the information that you claim to be CBI. Information not marked as CBI may be authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

(iv) The preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol, or other online file sharing services. Electronic submissions must be transmitted directly to the OAQPS CBI Office at the email address *oaqpscbi@epa.gov,* and as described above, should include clear CBI markings and be flagged to the attention of the Group Leader, Measurement Policy Group. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if you do not have your own file sharing service, please email *oaqpscbi@epa.gov* to request a file transfer link.

(v) If you cannot transmit the file electronically, you may send CBI information through the postal service to the following address: U.S. EPA, Attn: OAQPS Document Control Officer and Measurement Policy Group Lead, Mail Drop: C404–02, 109 T.W. Alexander Drive, P.O. Box 12055, RTP, NC 27711. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope.

(vi) All CBI claims must be asserted at the time of submission. Anything submitted using CEDRI cannot later be claimed CBI. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available.

(vii) You must submit the same file submitted to the CBI office with the CBI omitted to the EPA via the EPA's CDX as described in § 63.9(k).

(g) *Claims of EPA system outage.* After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, if you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in paragraphs (g)(1) through (7) of this section.

(1) You must have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either the EPA's CEDRI or CDX systems.

(2) The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due.

(3) The outage may be planned or unplanned.

(4) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(5) You must provide to the Administrator a written description identifying:

(i) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage;

(iii) Measures taken or to be taken to minimize the delay in reporting; and

(iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(6) The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(7) In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved.

(h) *Claims of force majeure.* After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, if you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of *force majeure* for failure to timely comply with the reporting requirement. To assert a claim of *force majeure,* you must meet the requirements outlined in paragraphs (h)(1) through (5) of this section.

(1) You may submit a claim if a *force majeure* event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of this section, a *force majeure* event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (*e.g.,* hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (*e.g.,* large scale power outage).

(2) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(3) You must provide to the Administrator:

(i) A written description of the *force majeure* event;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to the *force majeure* event;

(iii) Measures taken or to be taken to minimize the delay in reporting; and

(iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(4) The decision to accept the claim of *force majeure* and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(5) In any circumstance, the reporting must occur as soon as possible after the *force majeure* event occurs.

(i) *Use of CEMS for mercury.* If you use CEMS to demonstrate compliance with the mercury emissions limits in table 2 to this subpart, you must submit the results of the performance evaluation following the procedure specified in either paragraph (i)(1) or (2) of this section within 60 days after the date of completing each CEMS performance evaluation (as defined in § 63.2).

(1) For performance evaluations of continuous monitoring systems measuring relative accuracy test audit (RATA) pollutants that are supported by the EPA's ERT as listed on the EPA's ERT website at the time of the evaluation, you must submit the results of the performance evaluation to the EPA via the CEDRI. Performance evaluation data must be submitted in a file format generated through the use of the EPA's ERT or an alternate file format consistent with the XML schema listed on the EPA's ERT website. If you claim that some of the performance evaluation information being transmitted is CBI, you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group,

MD C404–02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this section.

(2) For any performance evaluations of continuous monitoring systems measuring RATA pollutants that are not supported by the EPA's ERT as listed on the ERT website at the time of the evaluation, you must submit the results of the performance evaluation to the Administrator at the appropriate address listed in § 63.13.

§63.9642 What records must I keep?

(a) On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, you must keep the records listed in paragraphs (a)(1) through (3) of this section. After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, you must keep the records listed in paragraphs (a)(1) through (6) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that you submitted, according to the requirements in §63.10(b)(2)(xiv).

(2) On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, the records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction. After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, a startup, shutdown, and malfunction plan is not required.

(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).

(4) In the event that an affected unit fails to meet an applicable standard, record the number of failures. For each failure record the date, time, the cause and duration of each failure.

(5) For each failure to meet an applicable standard, record and retain a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions.

(6) Record actions taken in accordance with the general duty requirements to minimize emissions in §63.9600(a) and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

(b) For each COMS and CEMS, you must keep the records specified in paragraphs (b)(1) through (5) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Monitoring data for COMS during a performance evaluation as required in §63.6(h)(7)(i) and (ii).

(3) On or before January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, previous (that is, superseded) versions of the performance evaluation plan as required in §63.8(d)(3). After January 25, 2021, for affected sources that commenced construction or reconstruction on or before September 25, 2019, and after July 28, 2020, or upon start-up, which ever date is later, for affected sources that commenced construction or reconstruction after September 25, 2019, previous (that is, superseded) versions of the performance evaluation plan as required in §63.9632(b)(5), with the program of corrective action included in the plan required under §63.8(d)(2).

(4) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(5) If you use mercury CEMS to demonstrate compliance with the mercury emission standard in table 2 of the subpart in accordance with § 63.9623(e), records of requests for alternatives to the relative accuracy test for CEMS as required in § 63.8(f)(6)(i).

(c) You must keep the records required in §§63.9634 through 63.9636 to show continuous compliance with each emission limitation, work practice standard, and operation and maintenance requirement that applies to you.

(d) If you elect the mercury emissions averaging compliance alternative pursuant to § 63.9623(d), you must keep a copy of the emission averaging implementation plan required in § 63.9623(d)(2), records of the taconite pellet production rate for each furnace included in the averaging, and all calculations required under § 63.9634(m).

(e) If you elect to adjust the activated carbon injection rate based on the taconite pellet production rate in accordance with the provisions in § 63.9634(n), you must keep a copy of the activated carbon injection implementation plan and records of the taconite pellet production rate and activated carbon injection rate.

(f) If you use CEMS to demonstrate compliance with the mercury emissions limits in table 2 to this subpart, you must keep records of the notifications required in § 63.9642(f).

§63.9643 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to §63.10(b)(1). You can keep the records offsite for the remaining 3 years.

Other Requirements and Information

§63.9650 What parts of the General Provisions apply to me?

Table 4 to this subpart shows which parts of the General Provisions in §§ 63.1 through 63.16 apply to you.

§63.9651 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the EPA, or a delegated authority such as your State, local, or tribal agency. If the EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of the EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to state, local, or tribal agencies are specified in paragraphs (c)(1) through (5) of this section.

(1) Approval of non-opacity emission limitations and work practice standards under §63.6(h)(9) and as defined in §63.90.

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

(5) Approval of an alternative to any electronic reporting to the EPA required by this subpart.

§63.9652 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, in §63.2, and in this section as follows.

Activated carbon injection (ACI) system means an add-on air pollution control system in which activated carbon or brominated activated carbon is injected into the flue gas steam upstream of a particulate matter control device to adsorb mercury in the exhaust stream. The absorbed mercury remains absorbed to the activated carbon and is collected in a primary or secondary particulate matter control device.

Affected source means each new or existing ore crushing and handling operation, ore dryer, indurating furnace, or finished pellet handling operation, at your taconite iron ore processing plant.

Bag leak detection system means a system that is capable of continuously monitoring relative particulate matter (dust) loadings in the exhaust of a baghouse to detect bag leaks and other upset conditions. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light scattering, light transmittance, or other effect to continuously monitor relative particulate matter loadings.

Crusher means a machine used to crush taconite ore and includes feeders or conveyors located immediately below the crushing surfaces. Crushers include, but are not limited to, gyratory crushers and cone crushers.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation (including operating limits) or operation and maintenance requirement; or

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit.

Dry sorbent injection (DSI) system means an add-on air pollution control system that injects dry alkaline sorbent (dry injection) or sprays an alkaline sorbent (spray dryer) to react with and neutralize acid gas in the exhaust stream forming a dry powder material that is collected by a primary or secondary particulate matter control device.

Dynamic wet scrubber means an air emissions control device which utilizes a mechanically powered fan to cause contact between the process exhaust gas stream and the scrubbing liquid which are introduced concurrently into the fan inlet.

Electrostatic Precipitator (ESP) means a device that removes suspended particulate matter from flue exhaust by applying a high-voltage electrostatic charge to the particles, which are then attracted to and collected on a grounded plate. In a dry ESP, the particles are dislodged from the plate by rapping and are collected in a hopper positioned below the plate. In a wet ESP, particulates are removed from the plate by washing with water.

Emission limitation means any emission limit, opacity limit, or operating limit.

Finished pellet handling means the transfer of fired taconite pellets from the indurating furnace to the finished pellet stockpiles at the plant. Finished pellet handling includes, but is not limited to, furnace discharge or grate discharge, and finished pellet screening, transfer, and storage. The atmospheric pellet cooler vent stack and gravity conveyor gallery vents designed to remove heat and water vapor from the structure are not included as a part of the finished pellet handling affected source.

Fugitive dust emission source means a stationary source from which particles are discharged to the atmosphere due to wind or mechanical inducement such as vehicle traffic. Fugitive dust sources include, but are not limited to:

(1) Stockpiles (includes, but is not limited to, stockpiles of uncrushed ore, crushed ore, or finished pellets);

(2) Material transfer points;

(3) Plant roadways;

(4) Tailings basins;

(5) Pellet loading areas; and

(6) Yard areas.

Grate feed means the transfer of unfired taconite pellets from the pelletizer into the indurating furnace.

Grate kiln indurating furnace means a furnace system that consists of a traveling grate, a rotary kiln, and an annular cooler. The grate kiln indurating furnace begins at the point where the grate feed conveyor discharges the green balls onto the furnace traveling grate and ends where the hardened pellets exit the cooler. The atmospheric pellet cooler vent stack is not included as part of the grate kiln indurating furnace.

Indurating means the process whereby unfired taconite pellets, called green balls, are hardened at high temperature in an indurating furnace. Types of indurating furnaces include straight grate indurating furnaces and grate kiln indurating furnaces.

Ore crushing and handling means the process whereby dry taconite ore is crushed and screened. Ore crushing and handling includes, but is not limited to, all dry crushing operations (e.g., primary, secondary, and tertiary crushing), dry ore conveyance and transfer points, dry ore classification and screening, dry ore storage and stockpiling, dry milling, dry cobbing (i.e., dry magnetic separation), and the grate feed. Ore crushing and handling specifically excludes any operations where the dry crushed ore is saturated with water, such as wet milling and wet magnetic separation.

Ore dryer means a rotary dryer that repeatedly tumbles wet taconite ore concentrate through a heated air stream to reduce the amount of entrained moisture in the taconite ore concentrate.

Pellet cooler vent stacks means atmospheric vents in the cooler section of the grate kiln indurating furnace that exhaust cooling air that is not returned for recuperation. Pellet cooler vent stacks are not to be confused with the cooler discharge stack, which is in the pellet loadout or dumping area.

Pellet loading area means that portion of a taconite iron ore processing plant where taconite pellets are loaded into trucks or railcars.

Responsible official means responsible official as defined in §63.2.

Rod-deck venturi scrubber means a wet scrubber emission control device in which the inlet air flows through a bed of parallel metal pipes spaced apart to produce a series of parallel venturi throats.

Screen means a device for separating material according to size by passing undersize material through one or more mesh surfaces (screens) in series and retaining oversize material on the mesh surfaces (screens).

Storage bin means a facility for storage (including surge bins and hoppers) of taconite ore or taconite pellets prior to further processing or loading.

Straight grate indurating furnace means a furnace system that consists of a traveling grate that carries the taconite pellets through different furnace temperature zones. In the straight grate indurating furnace a layer of fired pellets, called the hearth layer, is placed on the traveling grate prior to the addition of unfired pellets. The

straight grate indurating furnace begins at the point where the grate feed conveyor discharges the green balls onto the furnace traveling grate and ends where the hardened pellets drop off of the traveling grate.

Taconite iron ore processing means the separation and concentration of iron ore from taconite, a low-grade iron ore, to produce taconite pellets.

Taconite ore means a low-grade iron ore suitable for concentration of magnetite or hematite by fine grinding and magnetic or flotation treatment, from which pellets containing iron can be produced.

Tailings basin means a natural or artificial impoundment in which gangue or other refuse material resulting from the washing, concentration or treatment of ground taconite iron ore is confined.

Wet scrubber means an air pollution control device that removes particulate matter and acid gases from the waste gas stream of stationary sources. The pollutants are removed primarily through the impaction, diffusion, interception and/or absorption of the pollutant onto droplets of liquid. Wet scrubbers include venturi scrubbers, marble bed scrubbers, or impingement scrubbers. For purposes of this subpart, wet scrubbers do not include dynamic wet scrubbers.

Table 1 to Subpart RRRRR of Part 63—Emission Limits

As required in § 63.9590(a), you must comply with each applicable particulate matter emission limit in the following table:

If your affected source is . . .	**and the affected source is categorized as . . .**	**then you must comply with the flow-weighted mean concentration of particulate matter discharged to the atmosphere from the affected source, as determined using the procedures in §63.9621(b), such that you must not exceed . . .**
1. Ore crushing and handling emission units	Existing	0.008 grains per dry standard cubic foot (gr/dscf).
	New	0.005 gr/dscf.
2. Straight grate indurating furnace processing magnetite	Existing New	0.01 gr/dscf. 0.006 gr/dscf.
3. Grate kiln indurating furnace processing magnetite	Existing New	0.01 gr/dscf. 0.006 gr/dscf.
4. Grate kiln indurating furnace processing hematite	Existing New	0.03 gr/dscf. 0.018 gr/dscf.
5. Finished pellet handling emission units	Existing New	0.008 gr/dscf. 0.005 gr/dscf.
6. Ore dryer	Existing New	0.052 gr/dscf. 0.025 gr/dscf.

Table 2 to Subpart RRRRR of Part 63 – Mercury Emission Limits for Indurating Furnaces

As required in § 63.9590(a), you must comply with each applicable mercury emission limit in the following table:

For…	You must meet the following emission limits…
1. Indurating furnaces constructed or reconstructed before May 15, 2023	Either: (1) Mercury emissions from each furnace must not exceed 1.4×10^{-5} lb/LT of taconite pellets produced, or (2) Production-weighted average mercury emissions for a group of indurating furnaces, calculated according to Equation 6 in § 63.9634(m)(3), must not exceed 1.3×10^{-5} lb/LT.
2. Indurating furnaces constructed or reconstructed on or after May 15, 2023	Mercury emissions from each furnace must not exceed 2.6×10^{-6} lb/LT.

Table 3 to Subpart RRRR of Part 63 – Hydrogen Chloride and Hydrogen Fluoride Emission Limits for indurating Furnaces

As required in § 63.9590(a), you must comply with each applicable hydrogen chloride and hydrogen fluoride emission limit in the following table:

For…	You must meet the following emission limits…
1. Indurating furnaces constructed or reconstructed before May 15, 2023	Hydrogen chloride emissions must not exceed 4.6×10^{-2} lb/Long Ton of taconite pellets produced. Hydrogen fluoride emissions must not exceed 1.2×10^{-2} lb/Long Ton of taconite pellets produced.
2. Indurating furnaces constructed or reconstructed on or after May 15, 2023	Hydrogen chloride emissions must not exceed 4.4×10^{-4} lb/Long Ton of taconite pellets produced. Hydrogen fluoride emissions must not exceed 3.3×10^{-4} lb/Long Ton of taconite pellets produced.

Table 4 to Subpart RRRRR of Part 63—Applicability of General Provisions to Subpart RRRRR of Part 63

As required in §63.9650, you must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) shown in the following table:

Citation	Subject	Applies to subpart RRRRR	Explanation
§63.1(a)(1)-(4)	Applicability	Yes	
§63.1(a)(5)	[Reserved]	No	
§63.1(a)(6)	Applicability	Yes	
§63.1(a)(7)-(9)	[Reserved]	No	
§63.1(a)(10)-(14)	Applicability	Yes	
§63.1(b)(1)	Initial Applicability Determination	Yes	

Citation	Subject	Applies to subpart RRRRR	Explanation
§63.1(b)(2)	[Reserved]	No	
§63.1(b)(3)	Initial Applicability Determination	Yes	
§63.1(c)(1)-(2)	Applicability After Standard Established, Permit Requirements	Yes	
§63.1(c)(3)-(4)	[Reserved]	No	
§63.1(c)(5)	Area Source Becomes Major	Yes	
§63.1(c)(6)	Reclassification	Yes	
§63.1(d)	[Reserved]	No	
§63.1(e)	Equivalency of Permit Limits	Yes	
§63.2	Definitions	Yes	
§63.3(a)-(c)	Units and Abbreviations	Yes	
§63.4(a)(1)-(2)	Prohibited Activities	Yes	
§63.4(a)(3)-(5)	[Reserved]	No	
§63.4(b)-(c)	Circumvention, Fragmentation	Yes	
§63.5(a)(1)-(2)	Construction/Reconstruction, Applicability	Yes	
§63.5(b)(1)	Construction/Reconstruction, Applicability	Yes	
§63.5(b)(2)	[Reserved]	No	
§63.5(b)(3)-(4)	Construction/Reconstruction, Applicability	Yes	
§63.5(b)(5)	[Reserved]	No	
§63.5(b)(6)	Applicability	Yes	
§63.5(c)	[Reserved]	No	
§63.5(d)(1)-(4)	Application for Approval of Construction or Reconstruction	Yes	
§63.5(e)	Approval of Construction or Reconstruction	Yes	
§63.5(f)	Approval Based on State Review	Yes	
§63.6(a)	Compliance with Standards and Maintenance Requirements	Yes	
§63.6(b)(1)-(5)	Compliance Dates for	Yes	

Citation	Subject	Applies to subpart RRRRR	Explanation
	New/Reconstructed Sources		
§63.6(b)(6)	[Reserved]	No	
§63.6(b)(7)	Compliance Dates for New/Reconstructed Sources	Yes	
§63.6(c)(1)-(2)	Compliance Dates for Existing Sources	Yes	
§63.6(c)(3)-(4)	[Reserved]	No	
§63.6(c)(5)	Compliance Dates for Existing Sources	Yes	
§63.6(d)	[Reserved]	No	
§63.6(e)(1)(i)	Operation and Maintenance Requirements—General Duty to Minimize Emissions	Yes, on or before the compliance date specified in §63.9600(a). No, after the compliance date specified in §63.9600(a)	See §63.9600(a) for general duty requirement.
§63.6(e)(1)(ii)	Operation and Maintenance Requirements—Requirement to Correct Malfunction as Soon as Possible	No	
§63.6(e)(1)(iii)	Operation and Maintenance Requirements—Enforceability	Yes	
§63.6(e)(2)	[Reserved]	No	
§63.6(e)(3)	Startup, Shutdown, Malfunction (SSM) Plan	Yes, on or before the compliance date specified in §63.9610(c). No, after the compliance date specified in §63.9610(c)	
§63.6(f)(1)	SSM Exemption	No	See §63.9600(a).
§63.6(f)(2)-(3)	Methods for Determining Compliance	Yes	
§63.6(g)(1)-(3)	Alternative Nonopacity Standard	Yes	
§63.6(h), except (h)(1)	Compliance with Opacity and Visible Emission (VE) Standards	No	Opacity limits in subpart RRRRR are established as part of performance testing in order to set operating limits for ESPs.
§63.6(h)(1)	Compliance except during SSM	No	See §63.9600(a).
§63.6(i)(1)-(14)	Extension of Compliance	Yes	
§63.6(i)(15)	[Reserved]	No	
§63.6(i)(16)	Extension of Compliance	Yes	

Citation	Subject	Applies to subpart RRRRR	Explanation
§63.6(j)	Presidential Compliance Exemption	Yes	
§63.7(a)(1)-(2)	Applicability and Performance Test Dates	No	Subpart RRRRR specifies performance test applicability and dates.
§63.7(a)(3)-(4)	Performance Testing Requirements	Yes	
§63.7(b)	Notification	Yes	
§63.7(c)	Quality Assurance/Test Plan	Yes	
§63.7(d)	Testing Facilities	Yes	
§63.7(e)(1)	Conduct of Performance Tests	No	See §63.9621.
§63.7(e)(2)-(4)	Conduct of Performance Tests	Yes	
§63.7(f)	Alternative Test Method	Yes	
§63.7(g)	Data Analysis	Yes	Except this subpart specifies how and when the performance test results are reported.
§63.7(h)	Waiver of Tests	Yes	
§63.8(a)(1)-(2)	Monitoring Requirements	Yes	
§63.8(a)(3)	[Reserved]	No	
§63.8(a)(4)	Additional Monitoring Requirements for Control Devices in §63.11	No	Subpart RRRRR does not require flares.
§63.8(b)(1)-(3)	Conduct of Monitoring	Yes	
§63.8(c)(1)(i)	Operation and Maintenance of CMS	Yes, on or before the compliance date specified in §63.9632(b)(4). No, after the compliance date specified in §63.9632(b)(4)	See §63.9632 for operation and maintenance requirements for monitoring. See §63.9600(a) for general duty requirement.
§63.8(c)(1)(ii)	Spare parts for CMS Equipment	Yes	
§63.8(c)(1)(iii)	SSM Plan for CMS	Yes, on or before the compliance date specified in §63.9632(b)(4). No, after the compliance date specified in §63.9632(b)(4)	
§63.8(c)(2)-(3)	CMS Operation/Maintenance	Yes	
§63.8(c)(4)	Frequency of Operation for CMS	No	Subpart RRRRR specifies requirements for operation of CMS.

Citation	Subject	Applies to subpart RRRRR	Explanation
§63.8(c)(5)-(8)	CMS Requirements	Yes	CMS requirements in §63.8(c)(5) and (6) apply only to COMS for dry electrostatic precipitators.
§63.8(d)(1)-(2)	Monitoring Quality Control	Yes	
§63.8(d)(3)	Monitoring Quality Control	No	See §63.9632(b)(5).
§63.8(e)	Performance Evaluation of CMS	Yes	
§63.8(f)(1)-(5)	Alternative Monitoring Method	Yes	
§63.8(f)(6)	Relative Accuracy Test Alternative (RATA)	No	Subpart RRRRR does not require continuous emission monitoring systems.
§63.8(g)(1)-(4)	Data Reduction	Yes	
§63.8(g)(5)	Data That Cannot Be Used	No	Subpart RRRRR specifies data reduction requirements.
§63.9	Notification Requirements	Yes	Additional notifications for CMS in §63.9(g) apply to COMS for dry electrostatic precipitators.
§63.9(k)	Electronic reporting procedures	Yes	Only as specified in §63.9(j).
§63.10(a)	Recordkeeping and Reporting, Applicability and General Information	Yes	
§63.10(b)(1)	General Recordkeeping Requirements	Yes	
§63.10(b)(2)(i)	Records of SSM	No	See §63.9642 for recordkeeping when there is a deviation from a standard.
§63.10(b)(2)(ii)	Recordkeeping of Failures to Meet Standard	No	See §63.9642 for recordkeeping of (1) date, time and duration; (2) listing of affected source or equipment, and an estimate of the quantity of each regulated pollutant emitted over the standard; and (3) actions to minimize emissions and correct the failure.
§63.10(b)(2)(iii)	Maintenance Records	Yes	
§63.10(b)(2)(iv)	Actions Taken to Minimize Emissions During SSM	No	
§63.10(b)(2)(v)	Actions Taken to Minimize Emissions During SSM	No	

Citation	Subject	Applies to subpart RRRRR	Explanation
§63.10(b)(2)(vi)	Recordkeeping for CMS Malfunctions	Yes	
§63.10(b)(2)(vii)-(xii)	Recordkeeping for CMS	Yes	
§63.10(b)(2)(xiii)	Records for Relative Accuracy Test	No	Subpart RRRRR does not require continuous emission monitoring systems.
§63.10(b)(2)(xiv)	Records for Notification	Yes	
§63.10(b)(3)	Applicability Determinations	Yes	
§63.10(c)(1)-(6)	Additional Recordkeeping Requirements for Sources with CMS	Yes	
§63.10(c)(7)-(8)	Records of Excess Emissions and Parameter Monitoring Exceedances for CMS	No	Subpart RRRRR specifies recordkeeping requirements.
§63.10(c)(9)	[Reserved]	No	
§63.10(c)(10)-(14)	CMS Recordkeeping	Yes	
§63.10(c)(15)	Use of SSM Plan	No	
§63.10(d)(1)-(2)	General Reporting Requirements	Yes	Except this subpart specifies how and when the performance test results are reported.
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart RRRRR does not have opacity and VE standards that require the use of EPA Method 9 of appendix A-4 to 40 CFR part 60 or EPA Method 22 of appendix A-7 to 40 CFR part 60.
§63.10(d)(5)	SSM Reports	Yes, on or before the compliance date specified in §63.9641(b)(4). No, after the compliance date specified in §63.9641(b)(4)	See §63.9641 for malfunction reporting requirements.
§63.10(e)	Additional Reporting Requirements	Yes, except a breakdown of the total duration of excess emissions due to startup/shutdown in 63.10(e)(3)(vi)(I) is not required and when the summary report is submitted through CEDRI, the report is not required to be titled “Summary Report-Gaseous and Opacity Excess Emission and Continuous Monitoring System Performance.”	The electronic reporting template combines the information from the summary report and excess emission report with the Subpart RRRRR compliance report.

Citation	Subject	Applies to subpart RRRRR	Explanation
§63.10(f)	Waiver of Recordkeeping or Reporting Requirements	Yes	
§63.11	Control Device and Work Practice Requirements	No	Subpart RRRRR does not require flares.
§63.12(a)-(c)	State Authority and Delegations	Yes	
§63.13(a)-(c)	State/Regional Addresses	Yes	
§63.14(a)-(t)	Incorporations by Reference	Yes	
§63.15(a)-(b)	Availability of Information and Confidentiality	Yes	
§63.16	Performance Track Provisions	Yes	

Appendix P. 40 CFR pt. 63, subp. RRRRR Compliance Equations

40 CFR pt. 63, subp. RRRRR requires the use of specific equations to calculate the flow-weighted mean filterable PM concentration to show compliance with the applicable emission limits. These equations are found in 40 CFR § 63.9621(b)(3) for the ore crushing and handling affected source and finished pellet handling affected source and in 40 CFR § 63.9621(c) for the indurating furnace affected source. This appendix specifies the values to be used in these calculations.

Equation 1: Ore crushing and handling affected source

$$C_{OCH} = \frac{\sum_i C_i Q_i}{\sum_i Q_i}$$

Where:

C_{OCH} = flow-weighted average filterable PM concentration of the ore crushing and handling affected source represented by COMG 23, gr/dscf;

C_i = 3-hour average filterable PM concentration measured during the most recent performance test on an individual emission unit or emission units venting to a common stack *i*, gr/dscf;

Q_i = 3-hour average volumetric flow rate of stack gas measured during the most recent performance test on an individual emission unit or emission units venting to a common stack *i*, dscf/min;

i = individual emission unit or emission units venting to a common stack;

- EQUI 110;
- EQUI 111;
- EQUI 132;
- EQUI 251;
- EQUI 252;
- EQUI 262;
- EQUI 333;
- EQUI 334;
- EQUI 335;
- EQUI 336;
- EQUI 337;
- EQUI 338;
- EQUI 339;
- COMG 52 (EQUI 253 and EQUI 343);
- COMG 53 (EQUI 254 and EQUI 343);
- COMG 54 (EQUI 255 and EQUI 343);
- COMG 55 (EQUI 256 and EQUI 343);
- COMG 56 (EQUI 131 and EQUI 289);
- COMG 57 (EQUI 140 and EQUI 263); and
- COMG 58 (EQUI 141 and EQUI 264).

Equation 2: Finished pellet handling affected source

$$C_{OCH} = \frac{\sum_i C_i Q_i + \sum_k C_k Q_k}{\sum_i Q_i + \sum_k Q_k}$$

Where:

C_{FPH} = flow-weighted mean filterable PM concentration of the ore crushing and handling affected source represented by COMG 2, gr/dscf;

C_i = 3-hour average filterable PM concentration measured during the most recent performance test on an individual emission unit or emission units venting to a common stack *i*, gr/dscf;

Q_i = 3-hour average volumetric flow rate of stack gas measured during the most recent performance test on an individual emission unit or emission units venting to a common stack *i*, dscf/min;

i = individual emission unit or emission units venting to a common stack;

- EQUI 286;
- EQUI 287;
- EQUI 330;
- EQUI 376;
- COMG 49 (EQUI 300 and EQUI 303);
- COMG 50 (EQUI 127 and EQUI 135);
- COMG 51 (EQUI 135 and EQUI 259)
- COMG 65 (EQUI 114, EQUI 124, and EQUI 135); and
- COMG 66 (EQUI 331 and EQUI 347).

Equation 3: Indurating furnace affected source

$$C_{IF} = \frac{C_{257}Q_{257} + C_{258}Q_{258}}{Q_{257} + Q_{258}}$$

Where:

C_{IF} = flow-weighted mean filterable PM concentration for the indurating furnace represented by COMG 21, gr/dscf;

C_{E257} = 3-hour average filterable PM concentration measured during the most recent performance test on EQUI 257, gr/dscf;

Q_{E257} = 3-hour average volumetric flow rate of stack gas measured during the most recent performance test on EQUI 257, dscf/min;

C_{E258} = 3-hour average filterable PM concentration measured during the most recent performance test on EQUI 258, gr/dscf; and

Q_{E258} = 3-hour average volumetric flow rate of stack gas measured during the most recent performance test on EQUI 258, dscf/min.

Appendix Q. Mobile Source Emissions Calculations

As specified at FUGI 84 in the permit, the Permittee must use these equations to calculate daily mobile source NO_x, PM_{10}, and SO_2 emissions. The Permittee is required to track daily fuel usage and daily operating hours from each mobile source on a daily basis. When daily fuel use data is available for a mobile source, the Permittee must use the procedures in Equation 1, Equation 2, and Equation 3 to calculate daily emissions. In the case that the in-vehicle fuel monitor malfunctions or daily fuel use data is unavailable for a mobile source, the Permittee must use daily operating hour data to calculate daily emissions using Equation 4, Equation 5, and Equation 6. For a day when a mobile source operates and the Permittee is unable to determine both daily fuel use data and daily operating hour data for that mobile source, the Permittee must assume the full 24 hours per day when calculating daily emissions using Equation 4, Equation 5, and Equation 6 for that mobile source. The Permittee must use Equation 7, Equation 8, and Equation 9 to calculate the total daily emissions for each pollutant from the entire mobile source fleet.

The Permittee must calculate mobile source emissions using vehicle-specific emission factors provided by the vehicle manufacturer, if available. If vehicle-specific emission factors are not available, the Permittee must use the default emission factors listed in Table 1 and Table 2 of this appendix. The NO_x and PM_{10} emission factors in Table 1 of this appendix for non-locomotive mobile sources are set equal to the emission standards listed in Table 1 of 40 CFR § 1039.101 for Tier 4 engines. Table 1 of 40 CFR § 1039.101 does not include NO_x emission standards for engines less than 56 kW (75.1 hp) but instead includes standards for the sum of NO_x and non-methane hydrocarbon (NMHC) emissions. For these engines, the emission factors listed in this appendix assume that the NO_x emission factor is equal to the NO_x+NMHC emission standard. The NO_x and PM_{10} emission factors in Table 2 of this appendix for locomotive mobile sources are set equal to the emission standards from 40 CFR § 1033.101, Table 1 and Table 2. The SO_2 emission factors are determined by a sulfur mass balance assuming 15-ppm sulfur fuel and is equal for all engines at 0.0048 g/hp-hr. All of these calculations assume a fuel density of 6.943 lb/gal, a heating value of 139,000 Btu/gal, and an average brake-specific fuel consumption of 7,000 Btu/hp-hr.

Equation 1. Daily NO_x emissions using fuel usage data

$$E_{i,NO_x} = \frac{F_{i,NO_x} \times 139000 \frac{Btu}{gal} \times V_i}{7000 \frac{Btu}{hp-hr} \times 453.59 \frac{g}{lb}}$$

Where:

E_{i,NO_x} = daily NO_x emissions from mobile source *i*, lb/day;
F_{i,NO_x} = NO_x emission factor for mobile source *i* from Table 1, Table 2, or manufacturer's specifications, g/hp-hr; and
V_i = daily fuel usage for mobile source *i*, gal/day.

Equation 2. Daily PM_{10} emissions using fuel usage data

$$E_{i,PM_{10}} = \frac{F_{i,PM_{10}} \times 139000 \frac{Btu}{gal} \times V_i}{7000 \frac{Btu}{hp-hr} \times 453.59 \frac{g}{lb}}$$

Where:

$E_{i,PM_{10}}$ = daily PM_{10} emissions from mobile source *i*, lb/day;
$F_{i,PM_{10}}$ = PM_{10} emission factor for mobile source *i* from Table 1, Table 2, or manufacturer's specifications, g/hp-hr; and
V_i = daily fuel usage for mobile source *i*, gal/day.

Equation 3. Daily SO_2 emissions using fuel usage data

$$E_{i,SO_2} = \frac{F_{i,SO_2} \times 139000 \frac{Btu}{gal} \times V_i}{7000 \frac{Btu}{hp-hr} \times 453.59 \frac{g}{lb}}$$

Where:

E_{i,SO_2} = daily SO_2 emissions from mobile source *i*, lb/day;
F_{i,SO_2} = SO_2 emission factor for mobile source *i*, 0.0048 g/hp-hr; and
V_i = daily fuel usage for mobile source *i*, gal/day.

Equation 4. Daily NO_x emissions using operating hour data

$$E_{i,NO_x} = \frac{F_{i,NO_x} \times P_i \times t_i}{453.59 \frac{g}{lb}}$$

Where:

E_{i,NO_x} = daily NO_x emissions from mobile source *i*, lb/day;
F_{i,NO_x} = NO_x emission factor for mobile source *i* from Table 1, Table 2, or manufacturer's specifications, g/hp-hr;
P_i = power for mobile source *i*, hp; and
t_i = daily operating hours for mobile source *i*, hr/day.

Equation 5. Daily PM_{10} emissions using operating hour data

$$E_{i,PM_{10}} = \frac{F_{i,PM_{10}} \times P_i \times t_i}{453.59 \frac{g}{lb}}$$

Where:

$E_{i,PM_{10}}$ = daily PM_{10} emissions from mobile source *i*, lb/day;
$F_{i,PM_{10}}$ = PM_{10} emission factor for mobile source *i* from Table 1, Table 2, or manufacturer's specifications, g/hp-hr; and
P_i = power for mobile source *i*, hp; and
t_i = daily operating hours for mobile source *i*, hr/day.

Equation 6. Daily SO_2 emissions using operating hour data

$$E_{i,SO_2} = \frac{F_{i,SO_2} \times P_i \times t_i}{453.59 \frac{g}{lb}}$$

Where:

E_{i,SO_2} = daily SO_2 emissions from mobile source *i*, lb/day;
F_{i,SO_2} = SO_2 emission factor for mobile source *i*, 0.0048 g/hp-hr; and
P_i = power for mobile source *i*, hp; and
t_i = daily operating hours for mobile source *i*, hr/day.

E Equation 7. Total daily NO_x emissions

$$E_{total,NO_x} = \sum_i E_{i,NO_x}$$

Where:

E_{total,NO_x} = total daily NO_x emissions from all mobile sources, lb/day.

Equation 8. Total daily PM_{10} emissions

$$E_{total,PM_{10}} = \sum_i E_{i,PM_{10}}$$

Where:

$E_{total,PM_{10}}$ = total daily PM_{10} emissions from all mobile sources, lb/day.

Equation 9. Total daily SO_2 emissions

$$E_{total,SO_2} = \sum_i E_{i,SO_2}$$

Where:

E_{total,SO_2} = total daily SO_2 emissions from all mobile sources, lb/day.

Table 1. Non-locomotive NO_x and PM_{10} emission factors

Maximum engine power, P_i (hp)	**Engine tier**	**NO_x emission factor, F_{i,NO_x}** (g/hp-hr)	**PM_{10} emission factor, $F_{i,PM10}$** (g/hp-hr)
$P_i < 25.5$	Tier 4	5.6*	0.30
$25.5 \leq P_i < 75.1$	Tier 4	3.5*	0.022
$75.1 \leq P_i < 174.3$	Tier 4	0.30	0.015
$175 \leq P_i \leq 751$	Tier 4	0.30	0.015
$P_i > 750$	Tier 4	2.6	0.030

*NO_x emission factor is equal to the NO_x+NMHC emission standard.

Table 2. Locomotive emission factors

Locomotive type	**Engine tier**	**NO_x emission factor, F_{i,NO_x}** (g/hp-hr)	**PM_{10} emission factor, $F_{i,PM10}$** (g/hp-hr)
Line-haul locomotive	Tier 4	1.3	0.030
Switch locomotive	Tier 4	1.3	0.030

Appendix R. Mercury Emissions Calculations

Equation 1. Indurating furnace monthly uncontrolled mercury emissions calculation

$$Hg_{uncont.} = \left(W_{G,h}C_{G,h} + W_{G,l}C_{G,l}\right) - \left(W_{P,h}C_{P,h} + W_{P,l}C_{P,l}\right) + 2.6 \cdot 10^{-4}\ \frac{lb\ Hg}{MMscf} \times V_{ng}$$

Where:

$Hg_{uncont.}$	=	monthly uncontrolled indurating furnace mercury emissions, lb/month;
$W_{G,h}$	=	monthly high-flux greenball fed to the indurating furnace, metric ton greenball/month;
$C_{G,h}$	=	high-flux greenball mercury concentration as determined by the previous calendar month's sampling, lb/metric ton greenball;
$W_{G,l}$	=	monthly low-flux greenball feed to the indurating furnace, metric ton greenball/month;
$C_{G,l}$	=	low-flux greenball mercury concentration as determined by the previous calendar month's sampling, lb/metric ton greenball;
$W_{P,h}$	=	monthly weight of high-flux pellets produced, metric ton pellet/month;
$C_{P,h}$	=	high-flux pellet mercury concentration as determined by the previous calendar month's sampling, lb/metric ton pellet;
$W_{P,l}$	=	monthly weight of low-flux pellets produced by the indurating furnace, metric ton pellet/month;
$C_{P,l}$	=	low-flux pellet mercury concentration as determined by the previous calendar month's sampling, lb/metric ton pellet; and
V_{ng}	=	monthly volume of natural gas combusted in the indurating furnace, MMscf/month.