MINNESOTA POLLUTION CONTROL AGENCY

Preliminary Draft
Air Individual Permit
State Permit
05300499-101

Permittee: **Co-Operative Plating Co**

Facility name: **Co-Operative Plating Co**
1605 Iglehart Ave
Saint Paul, MN 55104
Ramsey County

Expiration date: Non-expiring Permit
* All Title I Conditions do not expire

State Permit: [Action Issue Date]

Permit characteristics: State; Limits to avoid Part 70/ True minor for NSR

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

This permit supersedes Air Emission Permit No. 05300499- 002 and authorizes the Permittee to operate 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.

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

Permit applications:

Title description	Application receipt date	Action number
State Permit	04/01/2014, with supplemental information received 8/2/2018. Final certified application received 7/18/2022.	05300499-101

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 (6204N)
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 http://www.pca.state.mn.us/nwqh472.)

3. Facility description

The Co-Operative Plating Co (Facility) is located at 1605 Iglehart Avenue, Saint Paul, Ramsey County, Minnesota.

Co-operative Plating Company (Facility) is a job shop metal finishing facility. The Facility operates eighteen separate metal coating lines that process many different base metals, including steel, brass, copper, and aluminum. Metal layers are plated onto the base metals for many reasons, including: wear, corrosion, and electrical resistance, and overall protection of the parts. The Facility uses both electrical and non-electrical processes for plating. Parts are cleaned in an alkaline cleaner, acid dipped to remove any oxidizers on the base metal, and then coated for the finished product.

The facility also operates two solvent degreasing units, two boilers, and several plating waste storage tanks. Pollutants of concern from the facility are particulate matter (PM), PM less than 10 microns (PM10), PM less than 2.5 microns (PM2.5), hazardous air pollutants (HAPs), and acid and metal particulates. The Facility has a horizontal wet scrubber that controls acid, metal particulate mists, and HAPs from the plating tanks; however, this unit is not required to operate because the facility meets all emission limits and health benchmarks without the control device.

4. Summary of subject items

SI ID: Description	Relationship type	Related SI ID: Description
TFAC 1: Co-operative Plating Co		
ACTV 3: All IAs		
COMG 1: Copper/Nickel/Chrome Line	has members	EQUI 28, EQUI 29, EQUI 30, EQUI 32, EQUI 92, EQUI 93, EQUI 94, EQUI 96, EQUI 179, EQUI 224, EQUI 231, EQUI 232, EQUI 233
COMG 2: Passivate Line	has members	EQUI 50, EQUI 97, EQUI 98, EQUI 142, EQUI 143, EQUI 234
COMG 3: Zinc #1 Line	has members	EQUI 53, EQUI 54, EQUI 103, EQUI 145, EQUI 181, EQUI 194, EQUI 204, EQUI 225, EQUI 226, EQUI 235, EQUI 236, EQUI 238, EQUI 263, EQUI 264, EQUI 265
COMG 6: Surtec Line	has members	EQUI 183, EQUI 212, EQUI 214, EQUI 222
COMG 8: Silver #3 Line	has members	EQUI 19, EQUI 20, EQUI 21, EQUI 89, EQUI 131, EQUI 132, EQUI 191, EQUI 201, EQUI 209, EQUI 228, EQUI 252, EQUI 255, EQUI 256, EQUI 261,

SI ID: Description	Relationship type	Related SI ID: Description
		EQUI 262
COMG 11: Electropolish Line	has members	EQUI 67, EQUI 151, EQUI 272
COMG 12: Cadmium Hand Line	has members	EQUI 114, EQUI 138, EQUI 202, EQUI 203
COMG 14: Plating and Polishing Operations (NESHAP WWWWWW)	has members	EQUI 5, EQUI 9, EQUI 48, EQUI 72, EQUI 77, EQUI 78, EQUI 83, EQUI 84, EQUI 92, EQUI 93, EQUI 94, EQUI 99, EQUI 103, EQUI 106, EQUI 109, EQUI 110, EQUI 114, EQUI 116, EQUI 132, EQUI 138, EQUI 143, EQUI 181, EQUI 182, EQUI 184, EQUI 186, EQUI 194, EQUI 195, EQUI 196, EQUI 197, EQUI 198, EQUI 200, EQUI 202, EQUI 203, EQUI 204, EQUI 220, EQUI 224, EQUI 225, EQUI 228, EQUI 229, EQUI 230, EQUI 235, EQUI 238, EQUI 239, EQUI 245, EQUI 246,

SI ID: Description	Relationship type	Related SI ID: Description
		EQUI 247, EQUI 248, EQUI 251, EQUI 258, EQUI 263
COMG 15: Black Oxide/Phosphate Line	has members	EQUI 37, EQUI 38, EQUI 39, EQUI 206, EQUI 227, EQUI 239, EQUI 240, EQUI 241
COMG 16: Zinc Barrel Line	has members	EQUI 40, EQUI 56, EQUI 57, EQUI 58, EQUI 105, EQUI 106, EQUI 149, EQUI 182, EQUI 195, EQUI 242, EQUI 243, EQUI 245, EQUI 246
COMG 17: Electroless Nickel Line (Transfer Line)	has members	EQUI 3, EQUI 4, EQUI 5, EQUI 47, EQUI 247, EQUI 248, EQUI 258
COMG 18: Cadmium Transfer Rack Line	has members	EQUI 6, EQUI 60, EQUI 61, EQUI 62, EQUI 109, EQUI 110, EQUI 115, EQUI 116, EQUI 196, EQUI 197
COMG 19: Zinc Transfer Line 1	has members	EQUI 10, EQUI 11, EQUI 68, EQUI 69, EQUI 186, EQUI 207, EQUI 229
COMG 20: Anodize Line	has members	EQUI 72, EQUI 118, EQUI 153, EQUI 187, EQUI 188, EQUI 198, EQUI 208
COMG 21: Electroless Nickel Hand Line	has members	EQUI 12, EQUI 13, EQUI 33, EQUI 34, EQUI 51, EQUI 74, EQUI 76, EQUI 77, EQUI 78, EQUI 99, EQUI 180, EQUI 189, EQUI 199, EQUI 200, EQUI 230, EQUI 266, EQUI 267, EQUI 268
COMG 22: Electroless Nickel on Aluminum Line	has members	EQUI 15, EQUI 81, EQUI 83, EQUI 84, EQUI 123, EQUI 124, EQUI 126, EQUI 127, EQUI 178, EQUI 190, EQUI 250, EQUI 251
COMG 23: Strip Line	has members	EQUI 48, EQUI 205, EQUI 253
COMG 25: Hardcoat Line	has members	EQUI 9, EQUI 65, EQUI 91, EQUI 150, EQUI 184, EQUI 192, EQUI 213
COMG 26: Zinc Transfer Line 2	has members	EQUI 215, EQUI 216, EQUI 218, EQUI 220, EQUI 260, EQUI 269, EQUI 270, EQUI 271
COMG 27: Plating operations not subject to NESHAP WWWWWW	has members	EQUI 3, EQUI 4, EQUI 6, EQUI 10, EQUI 11, EQUI 12, EQUI 13, EQUI 15, EQUI 19, EQUI 20, EQUI 21, EQUI 28, EQUI 29, EQUI 30, EQUI 32, EQUI 33, EQUI 34, EQUI 37, EQUI 38, EQUI 39, EQUI 40,

SI ID: Description	Relationship type	Related SI ID: Description
		EQUI 47, EQUI 50, EQUI 51, EQUI 53, EQUI 54, EQUI 56, EQUI 57, EQUI 58, EQUI 60, EQUI 61, EQUI 62, EQUI 65, EQUI 67, EQUI 68, EQUI 69, EQUI 74, EQUI 76, EQUI 81, EQUI 89, EQUI 91, EQUI 96, EQUI 97, EQUI 98, EQUI 105, EQUI 115, EQUI 118, EQUI 123, EQUI 124, EQUI 126, EQUI 127, EQUI 131, EQUI 142, EQUI 145, EQUI 149, EQUI 150, EQUI 151, EQUI 153, EQUI 178, EQUI 179, EQUI 180, EQUI 183, EQUI 187, EQUI 188, EQUI 189, EQUI 190, EQUI 191, EQUI 192, EQUI 199, EQUI 201, EQUI 205, EQUI 206, EQUI 207, EQUI 208, EQUI 209, EQUI 212, EQUI 213, EQUI 214, EQUI 215, EQUI 216, EQUI 218, EQUI 222, EQUI 226, EQUI 227, EQUI 231, EQUI 232, EQUI 233, EQUI 234, EQUI 236, EQUI 240, EQUI 241, EQUI 242, EQUI 243, EQUI 250, EQUI 252, EQUI 253, EQUI 255, EQUI 256, EQUI 260, EQUI 261, EQUI 262, EQUI 264, EQUI 265, EQUI 266, EQUI 267, EQUI 268, EQUI 269, EQUI 270, EQUI 271, EQUI 272
EQUI 1: Boiler #1	sends to	STRU 2: Boiler
EQUI 2: Boiler #2	sends to	STRU 2: Boiler
EQUI 3: Soak Cleaner - Electroless Nickel Transfer	sends to	STRU 5: Scrubber Exhaust
EQUI 3: Soak Cleaner - Electroless Nickel Transfer	sends to	STRU 25: Building Exhaust Fan
EQUI 3: Soak Cleaner - Electroless Nickel Transfer	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 4: Muriatic Acid (Hydrochloric) - Electroless Nickel Transfer	sends to	STRU 5: Scrubber Exhaust
EQUI 4: Muriatic Acid (Hydrochloric) - Electroless Nickel Transfer	sends to	STRU 25: Building Exhaust Fan
EQUI 4: Muriatic Acid	is controlled	TREA 2: Wet

SI ID: Description	Relationship type	Related SI ID: Description
(Hydrochloric) - Electroless Nickel Transfer	by	Scrubber - High Efficiency
EQUI 5: Electroless Nickel North Bay - Electroless Nickel Transfer	sends to	STRU 5: Scrubber Exhaust
EQUI 5: Electroless Nickel North Bay - Electroless Nickel Transfer	sends to	STRU 25: Building Exhaust Fan
EQUI 5: Electroless Nickel North Bay - Electroless Nickel Transfer	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 6: Weak Nitric Acid - Cad Line	sends to	STRU 5: Scrubber Exhaust
EQUI 6: Weak Nitric Acid - Cad Line	sends to	STRU 25: Building Exhaust Fan
EQUI 6: Weak Nitric Acid - Cad Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 9: Yellow Iridite - Iridite Line	sends to	STRU 5: Scrubber Exhaust
EQUI 9: Yellow Iridite - Iridite Line	sends to	STRU 25: Building Exhaust Fan
EQUI 9: Yellow Iridite - Iridite Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 10: Soak Cleaner - Zinc Transfer Line	sends to	STRU 5: Scrubber Exhaust
EQUI 10: Soak Cleaner - Zinc Transfer Line	sends to	STRU 25: Building Exhaust Fan
EQUI 10: Soak Cleaner - Zinc Transfer Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 11: Electrocleaner - Zinc Transfer Line	sends to	STRU 5: Scrubber Exhaust
EQUI 11: Electrocleaner - Zinc Transfer Line	sends to	STRU 25: Building Exhaust Fan
EQUI 11: Electrocleaner - Zinc	is controlled by	TREA 2: Wet Scrubber -

SI ID: Description	Relationship type	Related SI ID: Description
Transfer Line		High Efficiency
EQUI 12: Zincate - Electroless Nickel Hand Line	sends to	STRU 5: Scrubber Exhaust
EQUI 12: Zincate - Electroless Nickel Hand Line	sends to	STRU 25: Building Exhaust Fan
EQUI 12: Zincate - Electroless Nickel Hand Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 13: Water White Nitric - Electroless Nickel Hand Line	sends to	STRU 5: Scrubber Exhaust
EQUI 13: Water White Nitric - Electroless Nickel Hand Line	sends to	STRU 25: Building Exhaust Fan
EQUI 13: Water White Nitric - Electroless Nickel Hand Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 15: Zincate - Eless Aluminum	sends to	STRU 5: Scrubber Exhaust
EQUI 15: Zincate - Eless Aluminum	sends to	STRU 25: Building Exhaust Fan
EQUI 15: Zincate - Eless Aluminum	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 19: Electrocleaner - Silver #3	sends to	STRU 5: Scrubber Exhaust
EQUI 19: Electrocleaner - Silver #3	sends to	STRU 25: Building Exhaust Fan
EQUI 19: Electrocleaner - Silver #3	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 20: Q - Pex Copper Cleaner - Silver #3	sends to	STRU 5: Scrubber Exhaust
EQUI 20: Q - Pex Copper Cleaner - Silver #3	sends to	STRU 25: Building Exhaust Fan
EQUI 20: Q - Pex Copper Cleaner - Silver #3	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 21: Silver Plate - Silver #3	sends to	STRU 5: Scrubber Exhaust
EQUI 21: Silver Plate -	sends to	STRU 25:

SI ID: Description	Relationship type	Related SI ID: Description
Silver #3		Building Exhaust Fan
EQUI 21: Silver Plate - Silver #3	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 22: Degreaser (modified)	sends to	STRU 25: Building Exhaust Fan
EQUI 28: Soak Cleaner - Copper/Nickel/Chrome Line	sends to	STRU 5: Scrubber Exhaust
EQUI 28: Soak Cleaner - Copper/Nickel/Chrome Line	sends to	STRU 25: Building Exhaust Fan
EQUI 28: Soak Cleaner - Copper/Nickel/Chrome Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 29: Electro Cleaner - Copper/Nickel/Chrome Line	sends to	STRU 5: Scrubber Exhaust
EQUI 29: Electro Cleaner - Copper/Nickel/Chrome Line	sends to	STRU 25: Building Exhaust Fan
EQUI 29: Electro Cleaner - Copper/Nickel/Chrome Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 30: Muriatic Acid (Hydrochloric) - Copper/Nickel/Chrome Line	sends to	STRU 5: Scrubber Exhaust
EQUI 30: Muriatic Acid (Hydrochloric) - Copper/Nickel/Chrome Line	sends to	STRU 25: Building Exhaust Fan
EQUI 30: Muriatic Acid (Hydrochloric) - Copper/Nickel/Chrome Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 32: TriChrome - Copper/Nickel/Chrome Line	sends to	STRU 5: Scrubber Exhaust
EQUI 32: TriChrome - Copper/Nickel/Chrome Line	sends to	STRU 25: Building Exhaust Fan
EQUI 32: TriChrome - Copper/Nickel/Chrome Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 33: Electrocleaner - Electroless Nickel Hand Line	sends to	STRU 5: Scrubber Exhaust
EQUI 33: Electrocleaner - Electroless Nickel Hand Line	sends to	STRU 25: Building Exhaust Fan
EQUI 33: Electrocleaner - Electroless Nickel Hand Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 34: Nitric Acid - Electroless Nickel Hand Line	sends to	STRU 5: Scrubber Exhaust
EQUI 34: Nitric Acid - Electroless Nickel Hand Line	sends to	STRU 25: Building Exhaust Fan
EQUI 34: Nitric Acid - Electroless Nickel Hand Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 37: Soak Cleaner - Oxide Line	sends to	STRU 5: Scrubber Exhaust
EQUI 37: Soak Cleaner - Oxide Line	sends to	STRU 25: Building Exhaust Fan
EQUI 37: Soak Cleaner - Oxide Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 38: Hydrochloric Acid - Oxide Line	sends to	STRU 5: Scrubber Exhaust
EQUI 38: Hydrochloric Acid - Oxide Line	sends to	STRU 25: Building Exhaust Fan
EQUI 38: Hydrochloric Acid - Oxide Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 39: Zinc Phosphate - Oxide Line	sends to	STRU 5: Scrubber Exhaust
EQUI 39: Zinc Phosphate - Oxide Line	sends to	STRU 25: Building Exhaust Fan
EQUI 39: Zinc Phosphate - Oxide Line	is controlled by	TREA 2: Wet Scrubber -

SI ID: Description	Relationship type	Related SI ID: Description
		High Efficiency
EQUI 40: Electrocleaner - Zinc Barrel Line	sends to	STRU 5: Scrubber Exhaust
EQUI 40: Electrocleaner - Zinc Barrel Line	sends to	STRU 25: Building Exhaust Fan
EQUI 40: Electrocleaner - Zinc Barrel Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 47: Electrocleaner - Electroless Nickel Transfer	sends to	STRU 5: Scrubber Exhaust
EQUI 47: Electrocleaner - Electroless Nickel Transfer	sends to	STRU 25: Building Exhaust Fan
EQUI 47: Electrocleaner - Electroless Nickel Transfer	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 48: Chromic Acid Strip - Strip Line	sends to	STRU 5: Scrubber Exhaust
EQUI 48: Chromic Acid Strip - Strip Line	sends to	STRU 25: Building Exhaust Fan
EQUI 48: Chromic Acid Strip - Strip Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 50: Muriatic Acid (Hydrochloric) - Passivate Line	sends to	STRU 5: Scrubber Exhaust
EQUI 50: Muriatic Acid (Hydrochloric) - Passivate Line	sends to	STRU 25: Building Exhaust Fan
EQUI 50: Muriatic Acid (Hydrochloric) - Passivate Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 51: Hydrochloric Acid - Electroless Nickel Hand Line	sends to	STRU 5: Scrubber Exhaust
EQUI 51: Hydrochloric Acid - Electroless Nickel Hand Line	sends to	STRU 25: Building Exhaust Fan
EQUI 51: Hydrochloric Acid - Electroless Nickel Hand Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 53: Electro Cleaner - Zinc 1	sends to	STRU 5: Scrubber Exhaust
EQUI 53: Electro Cleaner - Zinc 1	sends to	STRU 25: Building Exhaust Fan
EQUI 53: Electro Cleaner - Zinc 1	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 54: Hydrochloric Acid - Zinc 1	sends to	STRU 5: Scrubber Exhaust
EQUI 54: Hydrochloric Acid - Zinc 1	sends to	STRU 25: Building Exhaust Fan
EQUI 54: Hydrochloric Acid - Zinc 1	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 56: Soak Cleaner - Zinc Barrel Line	sends to	STRU 5: Scrubber Exhaust
EQUI 56: Soak Cleaner - Zinc Barrel Line	sends to	STRU 25: Building Exhaust Fan
EQUI 56: Soak Cleaner - Zinc Barrel Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 57: Muriatic Acid (Weak) - Zinc Barrel Line	sends to	STRU 5: Scrubber Exhaust
EQUI 57: Muriatic Acid (Weak) - Zinc Barrel Line	sends to	STRU 25: Building Exhaust Fan
EQUI 57: Muriatic Acid (Weak) - Zinc Barrel Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 58: Muriatic Acid (Strong) - Zinc Barrel Line	sends to	STRU 5: Scrubber Exhaust
EQUI 58: Muriatic Acid (Strong) - Zinc Barrel Line	sends to	STRU 25: Building Exhaust Fan
EQUI 58: Muriatic Acid (Strong) - Zinc Barrel Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 60: Soak Cleaner - Cad Line	sends to	STRU 5: Scrubber Exhaust
EQUI 60: Soak Cleaner - Cad Line	sends to	STRU 25: Building Exhaust Fan

SI ID: Description	Relationship type	Related SI ID: Description
EQUI 60: Soak Cleaner - Cad Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 61: Electro Cleaner - Cad Line	sends to	STRU 5: Scrubber Exhaust
EQUI 61: Electro Cleaner - Cad Line	sends to	STRU 25: Building Exhaust Fan
EQUI 61: Electro Cleaner - Cad Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 62: Hydrochloric Acid - Cad Line	sends to	STRU 5: Scrubber Exhaust
EQUI 62: Hydrochloric Acid - Cad Line	sends to	STRU 25: Building Exhaust Fan
EQUI 62: Hydrochloric Acid - Cad Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 65: Nitric Acid - Surtec/Hardcoat Line	sends to	STRU 5: Scrubber Exhaust
EQUI 65: Nitric Acid - Surtec/Hardcoat Line	sends to	STRU 25: Building Exhaust Fan
EQUI 65: Nitric Acid - Surtec/Hardcoat Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 67: Muriatic Acid (Hydrochloric) - Electropolish Line	sends to	STRU 5: Scrubber Exhaust
EQUI 67: Muriatic Acid (Hydrochloric) - Electropolish Line	sends to	STRU 25: Building Exhaust Fan
EQUI 67: Muriatic Acid (Hydrochloric) - Electropolish Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 68: Strong Muriatic Acid (Hydrochloric) - Zinc Transfer Line	sends to	STRU 5: Scrubber Exhaust
EQUI 68: Strong Muriatic Acid (Hydrochloric) - Zinc Transfer Line	sends to	STRU 25: Building Exhaust Fan
EQUI 68: Strong Muriatic Acid (Hydrochloric) - Zinc Transfer Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 69: Weak Muriatic Acid (Hydrochloric) - Zinc Transfer Line	sends to	STRU 5: Scrubber Exhaust
EQUI 69: Weak Muriatic Acid (Hydrochloric) - Zinc Transfer Line	sends to	STRU 25: Building Exhaust Fan
EQUI 69: Weak Muriatic Acid (Hydrochloric) - Zinc Transfer Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 72: Nickel Acetate Seal - Anodize Line	sends to	STRU 5: Scrubber Exhaust
EQUI 72: Nickel Acetate Seal - Anodize Line	sends to	STRU 25: Building Exhaust Fan
EQUI 72: Nickel Acetate Seal - Anodize Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 74: Soak Cleaner - Electroless Nickel Hand Line	sends to	STRU 5: Scrubber Exhaust
EQUI 74: Soak Cleaner - Electroless Nickel Hand Line	sends to	STRU 25: Building Exhaust Fan
EQUI 74: Soak Cleaner - Electroless Nickel Hand Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 76: Desmutter - Electroless Nickel Hand Line	sends to	STRU 5: Scrubber Exhaust
EQUI 76: Desmutter - Electroless Nickel Hand Line	sends to	STRU 25: Building Exhaust Fan
EQUI 76: Desmutter - Electroless Nickel Hand Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 77: Electroless Nickel - West Bay - Electroless Nickel Hand Line	sends to	STRU 5: Scrubber Exhaust
EQUI 77: Electroless Nickel - West Bay - Electroless Nickel Hand Line	sends to	STRU 25: Building Exhaust Fan
EQUI 77: Electroless Nickel - West Bay -	is controlled by	TREA 2: Wet Scrubber -

SI ID: Description	Relationship type	Related SI ID: Description
Electroless Nickel Hand Line		High Efficiency
EQUI 78: Electroless Nickel - East Bay - Electroless Nickel Hand Line	sends to	STRU 5: Scrubber Exhaust
EQUI 78: Electroless Nickel - East Bay - Electroless Nickel Hand Line	sends to	STRU 25: Building Exhaust Fan
EQUI 78: Electroless Nickel - East Bay - Electroless Nickel Hand Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 81: Soak Cleaner - Eless Aluminum	sends to	STRU 5: Scrubber Exhaust
EQUI 81: Soak Cleaner - Eless Aluminum	sends to	STRU 25: Building Exhaust Fan
EQUI 81: Soak Cleaner - Eless Aluminum	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 83: Electroless Nickel South Bay - Eless Aluminum	sends to	STRU 5: Scrubber Exhaust
EQUI 83: Electroless Nickel South Bay - Eless Aluminum	sends to	STRU 25: Building Exhaust Fan
EQUI 83: Electroless Nickel South Bay - Eless Aluminum	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 84: Electroless Nickel North Bay - Eless Aluminum	sends to	STRU 5: Scrubber Exhaust
EQUI 84: Electroless Nickel North Bay - Eless Aluminum	sends to	STRU 25: Building Exhaust Fan
EQUI 84: Electroless Nickel North Bay - Eless Aluminum	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 89: Silver Strike - Silver #3	sends to	STRU 5: Scrubber Exhaust
EQUI 89: Silver Strike - Silver #3	sends to	STRU 25: Building Exhaust Fan
EQUI 89: Silver Strike - Silver #3	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 91: Soak Cleaner - Surtec/Hardcoat Line	sends to	STRU 5: Scrubber Exhaust
EQUI 91: Soak Cleaner - Surtec/Hardcoat Line	sends soil/waste to	STRU 25: Building Exhaust Fan
EQUI 91: Soak Cleaner - Surtec/Hardcoat Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 92: North Nickel - Copper/Nickel/Chrome Line	sends to	STRU 5: Scrubber Exhaust
EQUI 92: North Nickel - Copper/Nickel/Chrome Line	sends to	STRU 25: Building Exhaust Fan
EQUI 92: North Nickel - Copper/Nickel/Chrome Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 93: South Nickel - Copper/Nickel/Chrome Line	sends to	STRU 5: Scrubber Exhaust
EQUI 93: South Nickel - Copper/Nickel/Chrome Line	sends to	STRU 25: Building Exhaust Fan
EQUI 93: South Nickel - Copper/Nickel/Chrome Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 94: Nickel Barrel - Copper/Nickel/Chrome Line	sends to	STRU 5: Scrubber Exhaust
EQUI 94: Nickel Barrel - Copper/Nickel/Chrome Line	sends to	STRU 25: Building Exhaust Fan
EQUI 94: Nickel Barrel - Copper/Nickel/Chrome Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 96: Nitric Rack Strip - Copper/Nickel/Chrome Line	sends to	STRU 5: Scrubber Exhaust
EQUI 96: Nitric Rack Strip - Copper/Nickel/Chrome Line	sends to	STRU 25: Building Exhaust Fan
EQUI 96: Nitric Rack Strip - Copper/Nickel/Chrome	is controlled by	TREA 2: Wet Scrubber - High Efficiency

SI ID: Description	Relationship type	Related SI ID: Description
Line		
EQUI 97: Soak Cleaner - Passivate Line	sends to	STRU 5: Scrubber Exhaust
EQUI 97: Soak Cleaner - Passivate Line	sends to	STRU 25: Building Exhaust Fan
EQUI 97: Soak Cleaner - Passivate Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 98: Electro Cleaner - Passivate Line	sends to	STRU 5: Scrubber Exhaust
EQUI 98: Electro Cleaner - Passivate Line	sends to	STRU 25: Building Exhaust Fan
EQUI 98: Electro Cleaner - Passivate Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 99: Electroless Nickel Mid Phos - Electroless Nickel Hand Line	sends to	STRU 5: Scrubber Exhaust
EQUI 99: Electroless Nickel Mid Phos - Electroless Nickel Hand Line	sends to	STRU 25: Building Exhaust Fan
EQUI 99: Electroless Nickel Mid Phos - Electroless Nickel Hand Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 103: Zinc-Nickel - Zinc 1	sends to	STRU 5: Scrubber Exhaust
EQUI 103: Zinc-Nickel - Zinc 1	sends to	STRU 25: Building Exhaust Fan
EQUI 103: Zinc-Nickel - Zinc 1	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 105: Seal - Zinc Barrel Line	sends to	STRU 5: Scrubber Exhaust
EQUI 105: Seal - Zinc Barrel Line	sends to	STRU 25: Building Exhaust Fan
EQUI 105: Seal - Zinc Barrel Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 106: Zinc-Nickel - Zinc Barrel Line	sends to	STRU 5: Scrubber Exhaust
EQUI 106: Zinc-Nickel - Zinc Barrel Line	sends to	STRU 25: Building Exhaust Fan
EQUI 106: Zinc-Nickel - Zinc Barrel Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 109: Cad Cyanide with brighteners - Cad Line	sends to	STRU 5: Scrubber Exhaust
EQUI 109: Cad Cyanide with brighteners - Cad Line	sends to	STRU 25: Building Exhaust Fan
EQUI 109: Cad Cyanide with brighteners - Cad Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 110: Cad Cyanide no brighteners - Cad Line	sends to	STRU 5: Scrubber Exhaust
EQUI 110: Cad Cyanide no brighteners - Cad Line	sends to	STRU 25: Building Exhaust Fan
EQUI 110: Cad Cyanide no brighteners - Cad Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 114: Olive Drab Chromate - Cad Hand Line	sends to	STRU 5: Scrubber Exhaust
EQUI 114: Olive Drab Chromate - Cad Hand Line	sends to	STRU 25: Building Exhaust Fan
EQUI 114: Olive Drab Chromate - Cad Hand Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 115: Hot Sulfuric Acid - Cad Line	sends to	STRU 5: Scrubber Exhaust
EQUI 115: Hot Sulfuric Acid - Cad Line	sends to	STRU 25: Building Exhaust Fan
EQUI 115: Hot Sulfuric Acid - Cad Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 116: Nickel Strike - Cad Line	sends to	STRU 5: Scrubber Exhaust
EQUI 116: Nickel Strike - Cad Line	sends to	STRU 25: Building Exhaust Fan

SI ID: Description	Relationship type	Related SI ID: Description
EQUI 116: Nickel Strike - Cad Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 118: Soak Cleaner - Anodize Line	sends to	STRU 5: Scrubber Exhaust
EQUI 118: Soak Cleaner - Anodize Line	sends to	STRU 25: Building Exhaust Fan
EQUI 118: Soak Cleaner - Anodize Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 123: Desmutter - Eless Aluminum	sends to	STRU 5: Scrubber Exhaust
EQUI 123: Desmutter - Eless Aluminum	sends to	STRU 25: Building Exhaust Fan
EQUI 123: Desmutter - Eless Aluminum	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 124: Desmutter - Eless Aluminum	sends to	STRU 5: Scrubber Exhaust
EQUI 124: Desmutter - Eless Aluminum	sends to	STRU 25: Building Exhaust Fan
EQUI 124: Desmutter - Eless Aluminum	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 126: Water White Nitric - Eless Aluminum	sends to	STRU 5: Scrubber Exhaust
EQUI 126: Water White Nitric - Eless Aluminum	sends to	STRU 25: Building Exhaust Fan
EQUI 126: Water White Nitric - Eless Aluminum	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 127: Nitric Acid for Brass - Eless Aluminum	sends to	STRU 5: Scrubber Exhaust
EQUI 127: Nitric Acid for Brass - Eless Aluminum	sends to	STRU 25: Building Exhaust Fan
EQUI 127: Nitric Acid for Brass - Eless Aluminum	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 131: Soak Cleaner - Silver #3	sends to	STRU 5: Scrubber Exhaust
EQUI 131: Soak Cleaner - Silver #3	sends to	STRU 25: Building Exhaust Fan
EQUI 131: Soak Cleaner - Silver #3	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 132: Electroless Nickel - Silver #3	sends to	STRU 5: Scrubber Exhaust
EQUI 132: Electroless Nickel - Silver #3	sends to	STRU 25: Building Exhaust Fan
EQUI 132: Electroless Nickel - Silver #3	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 138: Cadmium Cyanide - Cad Hand Line	sends to	STRU 5: Scrubber Exhaust
EQUI 138: Cadmium Cyanide - Cad Hand Line	sends to	STRU 25: Building Exhaust Fan
EQUI 138: Cadmium Cyanide - Cad Hand Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 142: Nitric Acid - Passivate Line	sends to	STRU 5: Scrubber Exhaust
EQUI 142: Nitric Acid - Passivate Line	sends to	STRU 25: Building Exhaust Fan
EQUI 142: Nitric Acid - Passivate Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 143: Passivate - Passivate Line	sends to	STRU 5: Scrubber Exhaust
EQUI 143: Passivate - Passivate Line	sends to	STRU 25: Building Exhaust Fan
EQUI 143: Passivate - Passivate Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 145: Zinc Cyanide - Zinc 1	sends to	STRU 5: Scrubber Exhaust
EQUI 145: Zinc Cyanide - Zinc 1	sends to	STRU 25: Building Exhaust Fan
EQUI 145: Zinc Cyanide	is controlled	TREA 2: Wet

SI ID: Description	Relationship type	Related SI ID: Description
- Zinc 1	by	Scrubber - High Efficiency
EQUI 149: Zinc Chloride - Zinc Barrel Line	sends to	STRU 5: Scrubber Exhaust
EQUI 149: Zinc Chloride - Zinc Barrel Line	sends to	STRU 25: Building Exhaust Fan
EQUI 149: Zinc Chloride - Zinc Barrel Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 150: Deoxidizer - Surtec/Hardcoat Line	sends to	STRU 5: Scrubber Exhaust
EQUI 150: Deoxidizer - Surtec/Hardcoat Line	sends to	STRU 25: Building Exhaust Fan
EQUI 150: Deoxidizer - Surtec/Hardcoat Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 151: Electrocleaner - Electropolish Line	sends to	STRU 5: Scrubber Exhaust
EQUI 151: Electrocleaner - Electropolish Line	sends to	STRU 25: Building Exhaust Fan
EQUI 151: Electrocleaner - Electropolish Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 153: Deoxidizer - Anodize Line	sends to	STRU 5: Scrubber Exhaust
EQUI 153: Deoxidizer - Anodize Line	sends to	STRU 25: Building Exhaust Fan
EQUI 153: Deoxidizer - Anodize Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 178: Weak Desmutter - Eless Aluminum	sends to	STRU 5: Scrubber Exhaust
EQUI 178: Weak Desmutter - Eless Aluminum	sends to	STRU 25: Building Exhaust Fan
EQUI 178: Weak Desmutter - Eless Aluminum	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 179: Copper Plate Bath - Copper/Nickel/Chrome Line	sends to	STRU 5: Scrubber Exhaust
EQUI 179: Copper Plate Bath - Copper/Nickel/Chrome Line	is controlled by	STRU 25: Building Exhaust Fan
EQUI 179: Copper Plate Bath - Copper/Nickel/Chrome Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 180: Copper Plate - Electroless Nickel Hand Line	sends to	STRU 5: Scrubber Exhaust
EQUI 180: Copper Plate - Electroless Nickel Hand Line	sends to	STRU 25: Building Exhaust Fan
EQUI 180: Copper Plate - Electroless Nickel Hand Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 181: Clear Chromate - Zinc 1	sends to	STRU 5: Scrubber Exhaust
EQUI 181: Clear Chromate - Zinc 1	sends to	STRU 25: Building Exhaust Fan
EQUI 181: Clear Chromate - Zinc 1	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 182: Clear Chromate - Zinc Barrel Line	sends to	STRU 5: Scrubber Exhaust
EQUI 182: Clear Chromate - Zinc Barrel Line	sends to	STRU 25: Building Exhaust Fan
EQUI 182: Clear Chromate - Zinc Barrel Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 183: Etch - Iridite Line	sends to	STRU 5: Scrubber Exhaust
EQUI 183: Etch - Iridite Line	sends to	STRU 25: Building Exhaust Fan
EQUI 183: Etch - Iridite Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 184: Nickel Acetate Seal - Surtec/Hardcoat Line	sends to	STRU 5: Scrubber Exhaust
EQUI 184: Nickel Acetate Seal -	sends to	STRU 25: Building

SI ID: Description	Relationship type	Related SI ID: Description
Surtec/Hardcoat Line		Exhaust Fan
EQUI 184: Nickel Acetate Seal - Surtec/Hardcoat Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 186: Clear Chromate - Zinc Transfer Line	sends to	STRU 5: Scrubber Exhaust
EQUI 186: Clear Chromate - Zinc Transfer Line	sends to	STRU 25: Building Exhaust Fan
EQUI 186: Clear Chromate - Zinc Transfer Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 187: Etch - Anodize Line	sends to	STRU 5: Scrubber Exhaust
EQUI 187: Etch - Anodize Line	sends to	STRU 25: Building Exhaust Fan
EQUI 187: Etch - Anodize Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 188: Nitric Acid - Anodize Line	sends to	STRU 5: Scrubber Exhaust
EQUI 188: Nitric Acid - Anodize Line	sends to	STRU 25: Building Exhaust Fan
EQUI 188: Nitric Acid - Anodize Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 189: Etch - Electroless Nickel Hand Line	sends to	STRU 5: Scrubber Exhaust
EQUI 189: Etch - Electroless Nickel Hand Line	sends to	STRU 25: Building Exhaust Fan
EQUI 189: Etch - Electroless Nickel Hand Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 190: Etch - Eless Aluminum	sends to	STRU 5: Scrubber Exhaust
EQUI 190: Etch - Eless Aluminum	sends to	STRU 25: Building Exhaust Fan
EQUI 190: Etch - Eless Aluminum	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 191: Sulfuric - Silver #3	sends to	STRU 5: Scrubber Exhaust
EQUI 191: Sulfuric - Silver #3	sends to	STRU 25: Building Exhaust Fan
EQUI 191: Sulfuric - Silver #3	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 192: Hard Coat - Surtec/Hardcoat Line	sends to	STRU 5: Scrubber Exhaust
EQUI 192: Hard Coat - Surtec/Hardcoat Line	sends to	STRU 25: Building Exhaust Fan
EQUI 192: Hard Coat - Surtec/Hardcoat Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 194: Chromate for Zinc-Nickel - Zinc 1	sends to	STRU 5: Scrubber Exhaust
EQUI 194: Chromate for Zinc-Nickel - Zinc 1	sends to	STRU 25: Building Exhaust Fan
EQUI 194: Chromate for Zinc-Nickel - Zinc 1	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 195: Chromate for Zinc-Nickel - Zinc Barrel Line	sends to	STRU 5: Scrubber Exhaust
EQUI 195: Chromate for Zinc-Nickel - Zinc Barrel Line	sends to	STRU 25: Building Exhaust Fan
EQUI 195: Chromate for Zinc-Nickel - Zinc Barrel Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 196: Clear Chromate - Cad Line	sends to	STRU 5: Scrubber Exhaust
EQUI 196: Clear Chromate - Cad Line	sends to	STRU 25: Building Exhaust Fan
EQUI 196: Clear Chromate - Cad Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 197: Yellow Chromate - Cad Line	sends to	STRU 5: Scrubber Exhaust
EQUI 197: Yellow Chromate - Cad Line	sends to	STRU 25: Building Exhaust Fan

SI ID: Description	Relationship type	Related SI ID: Description
EQUI 197: Yellow Chromate - Cad Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 198: Dichromate Seal - Anodize Line	sends to	STRU 5: Scrubber Exhaust
EQUI 198: Dichromate Seal - Anodize Line	sends to	STRU 25: Building Exhaust Fan
EQUI 198: Dichromate Seal - Anodize Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 199: Nitric Acid (Silver Rack Strip) - Electroless Nickel Hand Line	sends to	STRU 5: Scrubber Exhaust
EQUI 199: Nitric Acid (Silver Rack Strip) - Electroless Nickel Hand Line	sends to	STRU 25: Building Exhaust Fan
EQUI 199: Nitric Acid (Silver Rack Strip) - Electroless Nickel Hand Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 200: Chromate Post Dip - Electroless Nickel Hand Line	sends to	STRU 5: Scrubber Exhaust
EQUI 200: Chromate Post Dip - Electroless Nickel Hand Line	sends to	STRU 25: Building Exhaust Fan
EQUI 200: Chromate Post Dip - Electroless Nickel Hand Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 201: Bright Acid Tin - Silver #3	sends to	STRU 5: Scrubber Exhaust
EQUI 201: Bright Acid Tin - Silver #3	sends to	STRU 25: Building Exhaust Fan
EQUI 201: Bright Acid Tin - Silver #3	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 202: Clear Chromate - Cad Hand Line	sends to	STRU 5: Scrubber Exhaust
EQUI 202: Clear Chromate - Cad Hand Line	sends to	STRU 25: Building Exhaust Fan
EQUI 202: Clear Chromate - Cad Hand	is controlled by	TREA 2: Wet Scrubber -

SI ID: Description	Relationship type	Related SI ID: Description
Line		High Efficiency
EQUI 203: Yellow Chromate - Cad Hand Line	sends to	STRU 5: Scrubber Exhaust
EQUI 203: Yellow Chromate - Cad Hand Line	sends to	STRU 25: Building Exhaust Fan
EQUI 203: Yellow Chromate - Cad Hand Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 204: Black Chromate - Zinc 1	sends to	STRU 5: Scrubber Exhaust
EQUI 204: Black Chromate - Zinc 1	sends to	STRU 25: Building Exhaust Fan
EQUI 204: Black Chromate - Zinc 1	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 205: Cyanide Nickel Strip - Strip Line	sends to	STRU 5: Scrubber Exhaust
EQUI 205: Cyanide Nickel Strip - Strip Line	sends to	STRU 25: Building Exhaust Fan
EQUI 205: Cyanide Nickel Strip - Strip Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 206: Black Oxide - Oxide Line	sends to	STRU 5: Scrubber Exhaust
EQUI 206: Black Oxide - Oxide Line	sends to	STRU 25: Building Exhaust Fan
EQUI 206: Black Oxide - Oxide Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 207: Zinc Cyanide Plating Tank- Zinc Transfer Line	sends to	STRU 5: Scrubber Exhaust
EQUI 207: Zinc Cyanide Plating Tank- Zinc Transfer Line	sends to	STRU 25: Building Exhaust Fan
EQUI 207: Zinc Cyanide Plating Tank- Zinc Transfer Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 208: Anodize Tank - Anodize Line	sends to	STRU 5: Scrubber Exhaust
EQUI 208: Anodize	sends to	STRU 25:

SI ID: Description	Relationship type	Related SI ID: Description
Tank - Anodize Line		Building Exhaust Fan
EQUI 208: Anodize Tank - Anodize Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 209: Nitric Rack Strip Large - Silver #3	sends to	STRU 5: Scrubber Exhaust
EQUI 209: Nitric Rack Strip Large - Silver #3	sends to	STRU 25: Building Exhaust Fan
EQUI 209: Nitric Rack Strip Large - Silver #3	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 212: Deoxidizer - Iridite Line	sends to	STRU 5: Scrubber Exhaust
EQUI 212: Deoxidizer - Iridite Line	sends to	STRU 25: Building Exhaust Fan
EQUI 212: Deoxidizer - Iridite Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 213: Etch - Surtec/Hardcoat Line	sends to	STRU 5: Scrubber Exhaust
EQUI 213: Etch - Surtec/Hardcoat Line	sends to	STRU 25: Building Exhaust Fan
EQUI 213: Etch - Surtec/Hardcoat Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 214: Soak Cleaner - Iridite Line	sends to	STRU 5: Scrubber Exhaust
EQUI 214: Soak Cleaner - Iridite Line	sends to	STRU 25: Building Exhaust Fan
EQUI 214: Soak Cleaner - Iridite Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 215: Soak Cleaner - Zinc Transfer Line 2	sends to	STRU 5: Scrubber Exhaust
EQUI 215: Soak Cleaner - Zinc Transfer Line 2	sends to	STRU 25: Building Exhaust Fan
EQUI 215: Soak Cleaner - Zinc Transfer Line 2	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 216: Electrocleaner - Zinc Transfer Line 2	sends to	STRU 5: Scrubber Exhaust
EQUI 216: Electrocleaner - Zinc Transfer Line 2	sends to	STRU 25: Building Exhaust Fan
EQUI 216: Electrocleaner - Zinc Transfer Line 2	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 218: Strong Muriatic Acid (Hydrochloric) - Zinc Transfer Line 2	sends to	STRU 5: Scrubber Exhaust
EQUI 218: Strong Muriatic Acid (Hydrochloric) - Zinc Transfer Line 2	sends to	STRU 25: Building Exhaust Fan
EQUI 218: Strong Muriatic Acid (Hydrochloric) - Zinc Transfer Line 2	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 220: Clear Chromate - Zinc Transfer Line 2	sends to	STRU 5: Scrubber Exhaust
EQUI 220: Clear Chromate - Zinc Transfer Line 2	sends to	STRU 25: Building Exhaust Fan
EQUI 220: Clear Chromate - Zinc Transfer Line 2	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 222: Surtec - Surtec/Hardcoat Line	sends to	STRU 5: Scrubber Exhaust
EQUI 222: Surtec - Surtec/Hardcoat Line	sends to	STRU 25: Building Exhaust Fan
EQUI 222: Surtec - Surtec/Hardcoat Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 224: Nickel Strike - Copper/Nickel/Chrome Line	sends to	STRU 5: Scrubber Exhaust
EQUI 224: Nickel Strike - Copper/Nickel/Chrome Line	sends to	STRU 25: Building Exhaust Fan
EQUI 224: Nickel Strike - Copper/Nickel/Chrome	is controlled by	TREA 2: Wet Scrubber - High Efficiency

SI ID: Description	Relationship type	Related SI ID: Description
Line		
EQUI 225: Yellow Chromate-Hex - Zinc 1	sends to	STRU 5: Scrubber Exhaust
EQUI 225: Yellow Chromate-Hex - Zinc 1	sends to	STRU 25: Building Exhaust Fan
EQUI 225: Yellow Chromate-Hex - Zinc 1	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 226: Weak Hydrochloric Acid - Zinc 1	sends to	STRU 5: Scrubber Exhaust
EQUI 226: Weak Hydrochloric Acid - Zinc 1	sends to	STRU 25: Building Exhaust Fan
EQUI 226: Weak Hydrochloric Acid - Zinc 1	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 227: Zinc Phosphate for Zinc Plated Parts - Oxide Line	sends to	STRU 5: Scrubber Exhaust
EQUI 227: Zinc Phosphate for Zinc Plated Parts - Oxide Line	sends to	STRU 25: Building Exhaust Fan
EQUI 227: Zinc Phosphate for Zinc Plated Parts - Oxide Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 228: Chromate Post Dip - Silver #3	sends to	STRU 5: Scrubber Exhaust
EQUI 228: Chromate Post Dip - Silver #3	sends to	STRU 25: Building Exhaust Fan
EQUI 228: Chromate Post Dip - Silver #3	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 229: Yellow Chromate - Zinc Transfer Line	sends to	STRU 5: Scrubber Exhaust
EQUI 229: Yellow Chromate - Zinc Transfer Line	sends to	STRU 25: Building Exhaust Fan
EQUI 229: Yellow Chromate - Zinc Transfer Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 230: Nickel Strike - Electroless Nickel Hand Line	sends to	STRU 5: Scrubber Exhaust
EQUI 230: Nickel Strike - Electroless Nickel Hand Line	sends to	STRU 25: Building Exhaust Fan
EQUI 230: Nickel Strike - Electroless Nickel Hand Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 231: Electrocleaner for Brass - Copper/Nickel/Chrome Line	sends to	STRU 5: Scrubber Exhaust
EQUI 231: Electrocleaner for Brass - Copper/Nickel/Chrome Line	sends to	STRU 25: Building Exhaust Fan
EQUI 231: Electrocleaner for Brass - Copper/Nickel/Chrome Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 232: Black Pearl Electroblack - Copper/Nickel/Chrome Line	sends to	STRU 5: Scrubber Exhaust
EQUI 232: Black Pearl Electroblack - Copper/Nickel/Chrome Line	sends to	STRU 25: Building Exhaust Fan
EQUI 232: Black Pearl Electroblack - Copper/Nickel/Chrome Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 233: Brass Strip - Copper/Nickel/Chrome Line	sends to	STRU 5: Scrubber Exhaust
EQUI 233: Brass Strip - Copper/Nickel/Chrome Line	sends to	STRU 25: Building Exhaust Fan
EQUI 233: Brass Strip - Copper/Nickel/Chrome Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 234: Citric Acid - Passivate Line	sends to	STRU 5: Scrubber Exhaust
EQUI 234: Citric Acid - Passivate Line	sends to	STRU 25: Building Exhaust Fan

SI ID: Description	Relationship type	Related SI ID: Description
EQUI 234: Citric Acid - Passivate Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 235: Yellow Chromate - Zinc 1	sends to	STRU 5: Scrubber Exhaust
EQUI 235: Yellow Chromate - Zinc 1	sends to	STRU 25: Building Exhaust Fan
EQUI 235: Yellow Chromate - Zinc 1	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 236: Weak Hydrochloric Acid - Zinc 1	sends to	STRU 5: Scrubber Exhaust
EQUI 236: Weak Hydrochloric Acid - Zinc 1	sends to	STRU 25: Building Exhaust Fan
EQUI 236: Weak Hydrochloric Acid - Zinc 1	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 238: Chromate Seal - Zinc 1	sends to	STRU 5: Scrubber Exhaust
EQUI 238: Chromate Seal - Zinc 1	sends to	STRU 25: Building Exhaust Fan
EQUI 238: Chromate Seal - Zinc 1	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 239: Chromic Acid Dip - Oxide Line	sends to	STRU 5: Scrubber Exhaust
EQUI 239: Chromic Acid Dip - Oxide Line	sends to	STRU 25: Building Exhaust Fan
EQUI 239: Chromic Acid Dip - Oxide Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 240: Oil For Phosphate - Oxide Line	sends to	STRU 5: Scrubber Exhaust
EQUI 240: Oil For Phosphate - Oxide Line	sends to	STRU 25: Building Exhaust Fan
EQUI 240: Oil For Phosphate - Oxide Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 241: Phosphate Conditioner - Oxide Line	sends to	STRU 5: Scrubber Exhaust
EQUI 241: Phosphate Conditioner - Oxide Line	sends to	STRU 25: Building Exhaust Fan
EQUI 241: Phosphate Conditioner - Oxide Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 242: Electrocleaner For Brass - Zinc Barrel Line	sends to	STRU 5: Scrubber Exhaust
EQUI 242: Electrocleaner For Brass - Zinc Barrel Line	sends to	STRU 25: Building Exhaust Fan
EQUI 242: Electrocleaner For Brass - Zinc Barrel Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 243: Soak Cleaner For Brass - Zinc Barrel Line	sends to	STRU 5: Scrubber Exhaust
EQUI 243: Soak Cleaner For Brass - Zinc Barrel Line	sends to	STRU 25: Building Exhaust Fan
EQUI 243: Soak Cleaner For Brass - Zinc Barrel Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 245: Yellow Chromate (Hex) For Zinc - Zinc Barrel Line	sends to	STRU 5: Scrubber Exhaust
EQUI 245: Yellow Chromate (Hex) For Zinc - Zinc Barrel Line	sends to	STRU 25: Building Exhaust Fan
EQUI 245: Yellow Chromate (Hex) For Zinc - Zinc Barrel Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 246: Clear Chromate For Zinc-Nickel - Zinc Barrel Line	sends to	STRU 5: Scrubber Exhaust
EQUI 246: Clear Chromate For Zinc-Nickel - Zinc Barrel Line	sends to	STRU 25: Building Exhaust Fan
EQUI 246: Clear Chromate For Zinc-Nickel - Zinc Barrel Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 247: Electroless Nickel South Bay - Electroless Nickel Transfer	sends to	STRU 5: Scrubber Exhaust
EQUI 247: Electroless Nickel South Bay - Electroless Nickel	sends to	STRU 25: Building Exhaust Fan

SI ID: Description	Relationship type	Related SI ID: Description
Transfer		
EQUI 247: Electroless Nickel South Bay - Electroless Nickel Transfer	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 248: Chromate - Electroless Nickel Transfer	sends to	STRU 5: Scrubber Exhaust
EQUI 248: Chromate - Electroless Nickel Transfer	sends to	STRU 25: Building Exhaust Fan
EQUI 248: Chromate - Electroless Nickel Transfer	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 250: Nitric Acid - Eless Aluminum	sends to	STRU 5: Scrubber Exhaust
EQUI 250: Nitric Acid - Eless Aluminum	sends to	STRU 25: Building Exhaust Fan
EQUI 250: Nitric Acid - Eless Aluminum	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 251: Chromate Post Drip - Eless Aluminum	sends to	STRU 5: Scrubber Exhaust
EQUI 251: Chromate Post Drip - Eless Aluminum	sends to	STRU 25: Building Exhaust Fan
EQUI 251: Chromate Post Drip - Eless Aluminum	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 252: Nitric Acid Strip For Tin - Silver #3	sends to	STRU 5: Scrubber Exhaust
EQUI 252: Nitric Acid Strip For Tin - Silver #3	sends to	STRU 25: Building Exhaust Fan
EQUI 252: Nitric Acid Strip For Tin - Silver #3	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 253: Nickel Strip - Strip Line	sends to	STRU 5: Scrubber Exhaust
EQUI 253: Nickel Strip - Strip Line	sends to	STRU 25: Building Exhaust Fan
EQUI 253: Nickel Strip - Strip Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 255: Acid Copper - Silver #3	sends to	STRU 5: Scrubber Exhaust
EQUI 255: Acid Copper - Silver #3	sends to	STRU 25: Building Exhaust Fan
EQUI 255: Acid Copper - Silver #3	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 256: Anti-Tarnish for Copper - Silver #3	sends to	STRU 5: Scrubber Exhaust
EQUI 256: Anti-Tarnish for Copper - Silver #3	sends to	STRU 25: Building Exhaust Fan
EQUI 256: Anti-Tarnish for Copper - Silver #3	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 258: Electroless Nickel Transfer Bath - South	sends to	STRU 5: Scrubber Exhaust
EQUI 258: Electroless Nickel Transfer Bath - South	sends to	STRU 25: Building Exhaust Fan
EQUI 258: Electroless Nickel Transfer Bath - South	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 259: Parts Washer	sends to	STRU 25: Building Exhaust Fan
EQUI 260: Zinc Generator - Zinc Transfer Line 2	sends to	STRU 5: Scrubber Exhaust
EQUI 260: Zinc Generator - Zinc Transfer Line 2	sends to	STRU 25: Building Exhaust Fan
EQUI 260: Zinc Generator - Zinc Transfer Line 2	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 261: Silver Strip - Silver 3	sends to	STRU 5: Scrubber Exhaust
EQUI 261: Silver Strip - Silver 3	sends to	STRU 25: Building Exhaust Fan
EQUI 261: Silver Strip - Silver 3	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 262: Acid Salt - Silver 3	sends to	STRU 5: Scrubber

SI ID: Description	Relationship type	Related SI ID: Description
		Exhaust
EQUI 262: Acid Salt - Silver 3	is controlled by	STRU 25: Building Exhaust Fan
EQUI 262: Acid Salt - Silver 3	sends to	TREA 2: Wet Scrubber - High Efficiency
EQUI 263: Zinc Nickel East - Zinc Hand Line	sends to	STRU 5: Scrubber Exhaust
EQUI 263: Zinc Nickel East - Zinc Hand Line	sends to	STRU 25: Building Exhaust Fan
EQUI 263: Zinc Nickel East - Zinc Hand Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 264: Soak Cleaner - Zinc Hand Line	sends to	STRU 5: Scrubber Exhaust
EQUI 264: Soak Cleaner - Zinc Hand Line	sends to	STRU 25: Building Exhaust Fan
EQUI 264: Soak Cleaner - Zinc Hand Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 265: Soak Cleaner - Zinc Hand Line	sends to	STRU 5: Scrubber Exhaust
EQUI 265: Soak Cleaner - Zinc Hand Line	sends to	STRU 25: Building Exhaust Fan
EQUI 265: Soak Cleaner - Zinc Hand Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 266: Copper Cleaner - EN Hand Line	sends to	STRU 5: Scrubber Exhaust
EQUI 266: Copper Cleaner - EN Hand Line	sends to	STRU 25: Building Exhaust Fan
EQUI 266: Copper Cleaner - EN Hand Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 267: Acid Salt - EN Hand Line	sends to	STRU 5: Scrubber Exhaust
EQUI 267: Acid Salt - EN Hand Line	sends to	STRU 25: Building Exhaust Fan
EQUI 267: Acid Salt - EN Hand Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 268: Electrocleaner for Brass - EN Hand Line	sends to	STRU 5: Scrubber Exhaust
EQUI 268: Electrocleaner for Brass - EN Hand Line	sends to	STRU 25: Building Exhaust Fan
EQUI 268: Electrocleaner for Brass - EN Hand Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 269: Alkaline Non-Cyanide Zinc - Zinc Transfer Line 2	sends to	STRU 5: Scrubber Exhaust
EQUI 269: Alkaline Non-Cyanide Zinc - Zinc Transfer Line 2	sends to	STRU 25: Building Exhaust Fan
EQUI 269: Alkaline Non-Cyanide Zinc - Zinc Transfer Line 2	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 270: Nitric Acid Bright Dip - Zinc Transfer Line 2	sends to	STRU 5: Scrubber Exhaust
EQUI 270: Nitric Acid Bright Dip - Zinc Transfer Line 2	sends to	STRU 25: Building Exhaust Fan
EQUI 270: Nitric Acid Bright Dip - Zinc Transfer Line 2	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 271: Zinc Phosphate - Zinc Transfer Line 2	sends to	STRU 5: Scrubber Exhaust
EQUI 271: Zinc Phosphate - Zinc Transfer Line 2	sends to	STRU 25: Building Exhaust Fan
EQUI 271: Zinc Phosphate - Zinc Transfer Line 2	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 272: Acid Treatment Equipment	sends to	STRU 5: Scrubber Exhaust
EQUI 272: Acid Treatment Equipment	sends to	STRU 25: Building Exhaust Fan
EQUI 272: Acid Treatment Equipment	is controlled by	TREA 2: Wet Scrubber - High Efficiency
STRU 2: Boiler		
STRU 5: Scrubber Exhaust		
EN Hand Line	by	Scrubber - High Efficiency
EQUI 268: Electrocleaner for Brass - EN Hand Line	sends to	STRU 5: Scrubber Exhaust
EQUI 268: Electrocleaner for Brass - EN Hand Line	sends to	STRU 25: Building Exhaust Fan
EQUI 268: Electrocleaner for Brass - EN Hand Line	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 269: Alkaline Non-Cyanide Zinc - Zinc Transfer Line 2	sends to	STRU 5: Scrubber Exhaust
EQUI 269: Alkaline Non-Cyanide Zinc - Zinc Transfer Line 2	sends to	STRU 25: Building Exhaust Fan
EQUI 269: Alkaline Non-Cyanide Zinc - Zinc Transfer Line 2	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 270: Nitric Acid Bright Dip - Zinc Transfer Line 2	sends to	STRU 5: Scrubber Exhaust
EQUI 270: Nitric Acid Bright Dip - Zinc Transfer Line 2	sends to	STRU 25: Building Exhaust Fan
EQUI 270: Nitric Acid Bright Dip - Zinc Transfer Line 2	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 271: Zinc Phosphate - Zinc Transfer Line 2	sends to	STRU 5: Scrubber Exhaust
EQUI 271: Zinc Phosphate - Zinc Transfer Line 2	sends to	STRU 25: Building Exhaust Fan
EQUI 271: Zinc Phosphate - Zinc Transfer Line 2	is controlled by	TREA 2: Wet Scrubber - High Efficiency
EQUI 272: Acid Treatment Equipment	sends to	STRU 5: Scrubber Exhaust
EQUI 272: Acid Treatment Equipment	sends to	STRU 25: Building Exhaust Fan
EQUI 272: Acid Treatment Equipment	is controlled by	TREA 2: Wet Scrubber - High Efficiency
STRU 2: Boiler		
STRU 5: Scrubber Exhaust		

SI ID: Description	Relationship type	Related SI ID: Description
STRU 23: Main Building		
STRU 24: Office/Welding Maintenance		

SI ID: Description	Relationship type	Related SI ID: Description
STRU 25: Building Exhaust Fan		
TREA 2: Wet Scrubber - High Efficiency		

5. Limits and other requirements

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TFAC 1	**Co-operative Plating Co**
5.1.1	The Permittee shall limit the Processing Building Enclosure Pressure Drop <= -0.007 inches of water between internal building pressure and outdoor ambient pressure as established in Method 204 of Appendix M to 40 CFR part 51. Pressure drop across the established enclosure shall be monitored at all times as described elsewhere in this permit. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]
5.1.2	The Permittee shall operate and maintain the Processing Building Enclosure as a permanent total enclosure that meets the criteria of Method 204 of Appendix M, 40 CFR pt. 51. The Processing Building Enclosure is defined as the area of the building enclosing the processing and production areas of the building, but excluding the shipping and receiving area. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0020, Minn. Stat. 116.07, subd. 4a(a), Minn. Stat. 116.385, subd. 3]
5.1.3	Processing Building Enclosure Pressure Drop Continuous Monitoring Device: The Permittee shall install, operate, and maintain a pressure drop monitoring system (pressure gauge) for the Processing Building Enclosure meeting the following requirements and maintain records of compliance with these requirements: (1) Complete a minimum of one cycle of operation for each successive 15-minute period having a minimum of four equally spaced successive cycles of CPMS operation in one hour; (2) Determine the average of all recorded readings for each successive 3-hour period of the pressure drop monitoring system for the Processing Building Enclosure; (3) Record the results of each inspection, calibration, and validation check of each pressure gauge; (4) Maintain the pressure gauges at all times and have available necessary parts for routine repairs of the monitoring equipment; (5) Operate the pressure gauges and collect pressure drop data at all times that a plating operation is operating, except during monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, if applicable, calibration checks and required zero and span adjustments); (6) Do not use data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities when calculating data averages. Use all the data collected during all other periods in calculating the data averages for determining compliance with the Processing Building Enclosure requirements; (7) Locate the pressure sensor(s) in or as close to a position that provides a representative measurement of the pressure drop across the monitored enclosure; (8) Use a pressure sensor with an accuracy of at least five percent of the minimum pressure drop to be maintained. (9) Perform an initial calibration of the sensor according to the manufacturer's requirements; (10) Conduct a validation check before initial operation or upon relocation or replacement of a sensor. Validation checks include comparison of sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated pressure sources; (11) Conduct accuracy audits every quarter and after every deviation. Accuracy audits include comparison of sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated pressure sources; (12) Perform monthly leak checks on pressure connections. A pressure of at least 1.0 inches of water column to the connection must yield a stable sensor result for at least 15 seconds; and (13) Perform a visual inspection of the sensor at least monthly. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, 4a(a), Minn. Stat. 116.385, subd. 3]
5.1.4	Processing Building Enclosure Pressure Drop Alarm: The Permittee shall install, operate, and maintain an alarm that triggers when the pressure drop set point is exceeded. The set point at which the alarm

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	triggers shall be set such that the alarm sounds when the pressure drop limit established in this permit is not met. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, 4a(a), Minn. Stat. 116.385, subd. 3]
5.1.5	Processing Building Enclosure Airflow Direction: The Permittee shall maintain airflow into the Processing Building Enclosure at all times. If airflow into the enclosure is not maintained, plating operations in the Processing Building Enclosure shall be shut down until airflow direction into the enclosure is restored and shall be reported as a deviation. The Permittee shall document and keep records of all deviations, including the date of malfunction, steps taken to restore airflow direction into the enclosure, and the date operation continued. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, 4a(a), Minn. Stat. 116.385, subd. 3]
5.1.6	Monitoring: Processing Building Enclosure Pressure Drop. The Permittee shall continuously monitor the pressure drop across natural draft openings established during the most-recent performance test following Method 204 of Appendix M to 40 CFR Part 51. If it is discovered that pressure drop is not being maintained, either by inspection or the alarm is sounded, plating operations in the facility shall be shut down until the pressure drop state is restored. Each violation of the pressure drop limit shall be reported as a deviation. The Permittee shall document and keep records of all deviations, including the date of malfunction, steps taken to restore the pressure drop, and the date operation continued. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, 4a(a), Minn. Stat. 116.385, subd. 3]
5.1.7	The Permittee shall maintain a list of all plating tanks. For each tank the list shall include the bath constituents and the concentrations of the constituents in the baths. For each tank the Permittee shall also track the make-up added to the baths. The list shall be updated monthly. [Minn. R. 7007.0800, subp. 5, Minn. R. 7007.1250, subp. 3]
5.1.8	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: TCE and nPB AERA Parameters, and Appendix C: 40 CFR pt. 63, subp. A. [Minn. R. 7007.0800, subp. 2(A)]
5.1.9	The Permittee must comply with Minn. Stat. 116.385. The Permittee may not use trichloroethylene at its permitted facility after June 1, 2022, 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. Stat. 116.385]
5.1.10	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)]
5.1.11	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]
5.1.12	Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated. [Minn. R. 7007.0800, subp. 16(J), Minn. R. 7007.0800, subp. 2(A) & (B)]
5.1.13	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

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	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 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)]
5.1.14	Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate. [Minn. R. 7019.1000, subp. 4]
5.1.15	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]
5.1.16	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 EPA Administrator or citizens under the Clean Air Act. [Minn. R. 7030.0010-7030.0080]
5.1.17	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)]
5.1.18	The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16. [Minn. R. 7007.0800, subp. 16]
5.1.19	Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in this permit. [Minn. R. ch. 7017]
5.1.20	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]
5.1.21	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]
5.1.22	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)]
5.1.23	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

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	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)]
5.1.24	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)]
5.1.25	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)]
5.1.26	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 non-expiring permits, these records shall be kept for a period of five years from the date the change was made. 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]
5.1.27	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 owner or operator does not have advance knowledge of the shutdown, notification shall be made to 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 shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over. [Minn. R. 7019.1000, subp. 3]
5.1.28	Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration 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 owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over. [Minn. R. 7019.1000, subp. 2]
5.1.29	Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment. [Minn. R. 7019.1000, subp. 1]
5.1.30	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 which 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;

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	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]
5.1.31	The parameters used in Air Toxics modeling performed for an AERA and for determining emission limits for permit number 05300499-101 are listed in Appendix B of this permit. For any changes that affect any modeled parameter documented in Appendix B, a Remodeling Submittal requirement is triggered. This includes changes that do not require a permit amendment as well as changes that require any type of permit amendment. Remodeling Submittal: The Permittee must submit to the Commissioner for approval any revisions of these parameters and must wait for a written approval before making such changes. For changes that require a permit amendment the proposal must be submitted with the permit amendment application. Written approval for changes that require an amendment will be in the form of an issued permit amendment for major amendments, a construction authorization letter for moderate amendments, or written approval for minor amendments. For minor amendments, written approval of the modeling may be given before permit issuance; however, the approval applies only to the modeling and not to any other changes. The information submitted must include, for stack and vent sources, source emission rates, location, heights, diameters, exit velocities, exit temperatures, discharge direction, use of rain caps or rain hats, and, if applicable, locations and dimensions of nearby buildings. For non-stack/vent sources, this includes the source emission rate, location, size and shape, release height, and, if applicable, any emission rate scalars, and the initial lateral dimensions and initial vertical dimensions and adjacent building heights. If the plume dispersion characteristics due to the revisions of the information in the proposal are equivalent to or better than the dispersion characteristics modeled in May 2019 then no further risk recalculation is needed because of changes to any modeled parameter. If the information does not demonstrate equivalent or better dispersion characteristics, or if a conclusion cannot readily be made about the dispersion, the Permittee must submit full remodeling, using currently acceptable methods, and use the Co-operative Plating Air Emissions Risk Analysis (AERA) report as a template for recalculating and submitting the risk estimates, for updating the qualitative description of the risks (e.g. land use, exposure assumptions, etc.), and to compare the recalculated risk estimates for all pollutants emitted from the facility to the risk management guidelines used in the Co-operative Plating AERA report. Updated risk assessment guidance (including toxicological values, emission estimates, etc.) should be incorporated when appropriate. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act. [Minn. R. 7007.0100, subp. 7(A), 7(L) & 7(M), Minn. R. 7007.0800, subps. 1-2, Minn. R. 7009.0010-7009.0090, Minn. Stat. 116.07, subd. 4a(a), Minn. Stat. 116.07, subd. 9]
5.1.32	Updated AERA Triggers: The Permittee shall update the most recent approved Co-operative Plating Air Emissions Risk Analysis (AERA) report if the Permittee proposes a change to the plating process that results in the emissions of: (1) chemicals of potential interest (COPI) for which health benchmarks have changed to more strict values in the current AERA Guidance, or (2) COPI for which there are new health benchmark values for in the current AERA Guidance, or (3) proposes to increase the emission rate or change the dispersion characteristics of any pollutant listed in Appendix B, this includes changes that do not require a permit amendment as well as changes that require any type of permit amendment. Changes made under the Administrative amendment process are excluded from this requirement. The Permittee shall first use the Co-operative Plating AERA report as a template for

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	recalculating and submitting the risk estimates, for updating the qualitative description of the risks (e.g. land use, exposure assumptions, etc.) and comparing the recalculated risk estimates to the risk management guidelines used in the most recent approved Co-operative Plating AERA. Updated risk assessment guidance (including toxicological values, emission estimates, etc.) shall be incorporated when appropriate. The Permittee shall keep records of the recalculated risk estimates and a statement of the purpose for making the change. For changes that require a permit amendment, the report with the updated AERA results must be submitted with the permit amended application. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. Stat. 116.07, subd. 4a(a), Minn. Stat. 116.07, subd. 9(2)]
5.1.33	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 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]
5.1.34	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)]
5.1.35	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)]
5.1.36	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]
5.1.37	Emission Fees: due 30 days after receipt of an MPCA bill. [Minn. R. 7002.0005-7002.0085]
COMG 14	**Plating and Polishing Operations (NESHAP WWWWWW)**
5.2.1	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. This limit applies to each unit individually. [Minn. R. 7011.0715, subp. 1(A)]
5.2.2	Opacity <= 20 percent opacity. This limit applies to each unit individually. [Minn. R. 7011.0715, subp. 1(B)]
5.2.3	Hours <= 8000 hours 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. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]
5.2.4	Hours: Daily Recordkeeping. On each day of operation, the Permittee shall calculate, record, and maintain a record of the total hours of operation. This shall be based on written logs or hour meter readings. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]
5.2.5	Hours: Monthly Recordkeeping. By the 15th of the month, the Permittee shall calculate and record the following: 1) The total hours of operation for the previous calendar month using the daily records; and 2) The 12-month rolling sum hours of operation for the previous 12-month period by summing the

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	monthly hours of operation for the previous 12 months. [Minn. R. 7007.0800, subps. 4-5]
5.2.6	For each non-cyanide electroplating, electroforming, or electropolishing tank, the Permittee shall use a wetting agent/fume suppressant in the bath of the affected tank as defined by 40 CFR Section 63.11511. [40 CFR 63.11507(a)(1), Minn. R. 7011.8250]
5.2.7	For each non-cyanide electroplating, electroforming, or electropolishing tank, the Permittee shall: i) initially add the wetting agent/fume suppressant in the amounts recommended by the manufacturer for the specific type of electrolytic process. ii) add wetting agent/fume suppressant in proportion to the other bath chemistry ingredients that are added to replenish the tank bath, as in the original make-up of the tank or in proportions such that the bath contents are returned to that of the original make-up of the bath. iii) If a wetting agent/fume suppressant is included in the electrolytic process bath chemicals used in the affected tank according to the manufacturer's instructions, it is not necessary to add additional wetting agent/fume suppressant to the tank to comply with this rule. [40 CFR 63.11507(a)(1)(i)-(iii), Minn. R. 7011.8250]
5.2.8	The Permittee shall keep the following records: (1) a copy of any Initial Notification and Notification of Compliance Status submitted and all documentation supporting those notifications; (2) Records specified in the General Provisions, 40 CFR Section 63.10(b)(2)(i)-(iii) & (xiv); (3) Records required to show continuous compliance with each management practice and equipment standard that applies to the facility. [40 CFR 63.11507(e), Minn. R. 7011.8250]
5.2.9	Records shall be kept for a minimum of 5 years, and kept on site for a minimum of 2 years following the date of each occurrence, measurement, maintenance, corrective action, report or record. [40 CFR 63.11507(f), Minn. R. 7011.8250]
5.2.10	The Permittee must comply with one of the following requirements: - The Permittee shall limit short-term or "flash" electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time. OR - The Permittee shall use a tank cover on all short-term or "flash" electroplating tanks for at least 95 percent of the plating time. [40 CFR 63.11507(b), Minn. R. 7011.8250]
5.2.11	For all tanks that use cyanide in the plating bath, as defined in 40 CFR Section 63.11511, the Permittee shall measure and record the pH of the tanks upon start-up. [40 CFR 63.11507(d)(1), Minn. R. 7011.8250]
5.2.12	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); 40 CFR 63.1(b)(3); 40 CFR 63.1(c)(1); 40 CFR 63.1(c)(2); 40 CFR 63.1(c)(5); 40 CFR 63.2; 40 CFR 63.3; 40 CFR 63.4(a); 40 CFR 63.4(b); 40 CFR 63.4(c); 40 CFR 63.6(a)(1); 40 CFR 63.6(b)(2); 40 CFR 63.6(c)(1); 40 CFR 63.6(c)(2); 40 CFR 63.10(a)(5); 40 CFR 63.10(a)(6); 40 CFR 63.10(a)(7);

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	40 CFR 63.10(b)(1); 40 CFR 63.10(b)(2)(i); 40 CFR 63.10(b)(2)(ii); 40 CFR 63.10(b)(2)(iii); 40 CFR 63.10(b)(2)(xiv); 40 CFR 63.10(b)(3); 40 CFR 63.10(d)(1); 40 CFR 63.10(f); 40 CFR 63.12; 40 CFR 63.13; 40 CFR 63.14; 40 CFR 63.15(a); and 40 CFR 63.15(b). A copy of 40 CFR pt. 63, subp. A is included in Appendix B. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than 3 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 63.11510, 40 CFR pt. 63, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-1500, Minn. R. 7011.7000, Minn. R. 7011.8250, Minn. R. 7017.1010 & 7017.2025, Minn. R. 7019.0100]
5.2.13	The Permittee must implement the following requirements, as practicable: - minimize bath agitation when removing any parts processed in the tank, as practicable except when necessary to meet part quality requirements. - maximize draining of bath solution back into the tank, as practicable, by extending drip time when removing parts from the tank; using drain boards (drip shields); or withdrawing parts slowly from the tank. - optimize the design of barrels, racks, and parts to minimize dragout of bath solution (such as by using slotted barrels and tilted racks, or by designing parts with flow-through holes), as practicable. - use tank covers, if already owned and available at the facility, whenever practicable. - minimize or reduce heating of process tanks, as practicable. - perform regular repair, maintenance, and preventative maintenance of racks, barrels, and other equipment associated with affected sources, as practicable. - minimize bath contamination. - maintain quality control of chemicals, and chemical and other bath ingredient concentration in the tanks, as practicable. - perform general good housekeeping, such as regular sweeping or vacuuming, if needed, and periodic washdowns, as practicable. - minimize spills and overflow of tanks, as practicable. - use squeegee rolls in continuous or reel-to-reel plating tanks, as practicable. - perform regular inspections to identify leaks and other opportunities for pollution prevention. [40 CFR 63.11507(g), Minn. R. 7011.8250]
5.2.14	To demonstrate continuous compliance with the applicable management practices and equipment standards specified in 40 CFR pt., 63, subp. WWWWWW, the Permittee must satisfy the requirements specified in 40 CFR Section 63.11508(d)(1) through (8). [40 CFR 63.11508(d), Minn. R. 7011.8250]
5.2.15	The Permittee shall prepare an annual certification of compliance report. The annual certification of compliance shall only be submitted if a deviation from the requirements of 40 CFR pt. 63, subp. WWWWWW occur during the reporting year. Each annual compliance report must be prepared no later than January 31 of the year immediately following the reporting period. If a deviation has occurred during the year, each annual compliance report shall be submitted along with the deviation report, and postmarked or delivered no later than January 31 of the year immediately following the reporting period. [40 CFR 63.11509(c), 40 CFR 63.11509(c)(7)]

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5.2.16	The annual compliance report shall include: 1) For electroplating, electroforming, or electropolishing tanks that use a wetting agent/fume suppressant to comply with this subpart, a statement that the Permittee added the wetting agent/fume suppressant to the bath according to the manufacturer's specification and instructions 2) For flash or short-term electroplating tanks, and the Permittee complies with 40 CFR pt. 63, subp. WWWWWW by limiting the plating time of the affected tank, a statement that the Permittee has limited the short-term or flash electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time. 3) For batch electrolytic processes or flash or short-term electroplating tanks, and the Permittee complies with 40 CFR pt. 63, subp. WWWWWW by operating the affected tank with a cover, a statement that the Permittee has operated the tank with the cover in place at least 95 percent of the electrolytic process time. 4) A statement that the Permittee has implemented the applicable management practices, as practicable. [40 CFR 63.11509(c)(1)-(6), Minn. R. 7011.8250]
COMG 27	**Plating operations not subject to NESHAP WWWWWW**
5.3.1	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. This limit applies to each unit individually. [Minn. R. 7011.0715, subp. 1(A)]
5.3.2	Opacity <= 20 percent opacity. This limit applies to each unit individually. [Minn. R. 7011.0715, subp. 1(B)]
5.3.3	Hours <= 8000 hours 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. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]
5.3.4	Hours: Daily Recordkeeping. On each day of operation, the Permittee shall calculate, record, and maintain a record of the total hours of operation. This shall be based on written logs or hour meter readings. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]
5.3.5	Hours: Monthly Recordkeeping. By the 15th of the month, the Permittee shall calculate and record the following: 1) The total hours of operation for the previous calendar month using the daily records; and 2) The 12-month rolling sum hours of operation for the previous 12-month period by summing the monthly hours of operation for the previous 12 months. [Minn. R. 7007.0800, subps. 4-5]
EQUI 1	**Boiler #1**
5.4.1	Filterable Particulate Matter <= 0.4 pounds per million Btu heat input. The potential to emit from the unit is 0.02 lb/MMBtu due to equipment design and allowable fuels. [Minn. R. 7011.0515, subp. 1]
5.4.2	Sulfur Dioxide <= 2.0 pounds per million Btu heat input. The potential to emit from the unit is 0.002 lb/MMBtu due to equipment design and allowable fuels. [Minn. R. 7011.0515, subp. 1]
5.4.3	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]
5.4.4	Fuel Types: natural gas and distillate fuel oil, only. The Permittee shall retain fuel purchase records on-site. [Minn. R. 7007.0800, subp. 2(A)]
5.4.5	Sulfur Content of Fuel <= 15 parts per million (0.0015 percent by weight). This limit applies to use of distillate fuel oil No. 2. [Minn. R. 7007.0800, subp. 2(A)]
5.4.6	The Permittee shall limit distillate fuel oil Fuel Usage <= 31,540 gallons 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. This limit applies to all distillate fuel oil used in EQUI 1. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]
5.4.7	The Permittee shall limit distillate fuel oil Fuel Usage <= 48 hours per calendar year for periodic

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	testing, maintenance, or operator training on liquid fuel as allowed under the definition of gas-fired boiler in 40 CFR 63.11237. Hours of operation using distillate fuel oil during periods of startup, gas curtailment, or gas supply interruptions are not included in the 48-hours. [Minn. R. 7007.0800, subp. 2(A)]
5.4.8	Fuel Supplier Certification: The Permittee shall obtain and maintain a fuel supplier certification for each shipment of distillate fuel oil, certifying that the sulfur content of the fuel is less than 0.0015% by weight. [Minn. R. 7007.0800, subps. 4-5]
5.4.9	Distillate fuel oil: Daily Recordkeeping. On each day of operation, the Permittee shall calculate, record, and maintain a record of the total gallons of distillate fuel oil used and the reason for the fuel usage (gas curtailment, gas supply interruption, maintenance, operator training, periodic testing, or startup). This shall be based on fuel usage meter readings. [Minn. R. 7007.0800, subps. 4-5]
5.4.10	Distillate fuel oil: Monthly Recordkeeping. By the 15th of the month, the Permittee shall calculate and record the following: 1) The total gallons of distillate fuel oil used for the previous calendar month using the daily records; and 2) The 12-month rolling sum of total gallons of distillate fuel oil used for the previous 12-month period by summing the monthly total gallons of distillate fuel oil used for the previous 12 months. [Minn. R. 7007.0800, subps. 4-5]
EQUI 2	**Boiler #2**
5.5.1	Filterable Particulate Matter <= 0.4 pounds per million Btu heat input. The potential to emit from the unit is 0.02 lb/MMBtu due to equipment design and allowable fuels. [Minn. R. 7011.0515, subp. 1]
5.5.2	Sulfur Dioxide <= 2.0 pounds per million Btu heat input. The potential to emit from the unit is 0.002 lb/MMBtu due to equipment design and allowable fuels. [Minn. R. 7011.0515, subp. 1]
5.5.3	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]
5.5.4	Fuel Type: natural gas and distillate fuel oil, only. The Permittee shall retain fuel purchase records on-site. [Minn. R. 7007.0800, subp. 2(A)]
5.5.5	Sulfur Content of Fuel <= 15 parts per million (0.0015 percent by weight). This limit applies to use of distillate fuel oil No. 2. [Minn. R. 7007.0800, subp. 2(A)]
5.5.6	The Permittee shall limit distillate fuel oil Fuel Usage <= 48 hours per calendar year for periodic testing, maintenance, or operator training on liquid fuel as allowed under the definition of gas-fired boiler in 40 CFR 63.11237. Hours of operation using distillate fuel oil during periods of startup, gas curtailment, or gas supply interruptions are not included in the 48-hours. [Minn. R. 7007.0800, subp. 2(A)]
5.5.7	The Permittee shall limit usage of distillate fuel oil Fuel Usage <= 31,540 gallons 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. This limit applies to all distillate fuel oil used in EQUI 2. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a]
5.5.8	Fuel Supplier Certification: The Permittee shall obtain and maintain a fuel supplier certification for each shipment of distillate fuel oil, certifying that the sulfur content of the fuel is less than 0.0015% by weight. [Minn. R. 7007.0800, subps. 4-5]
5.5.9	Distillate fuel oil: Daily Recordkeeping. On each day of operation, the Permittee shall calculate, record, and maintain a record of the total gallons of distillate fuel oil used and the reason for the fuel oil usage (gas curtailment, gas supply interruption, maintenance, operator training, periodic testing, or startup). This shall be based on fuel usage meter readings. [Minn. R. 7007.0800, subps. 4-5]
5.5.10	Distillate fuel oil: Monthly Recordkeeping. By the 15th of the month, the Permittee shall calculate and

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	record the following: 1) The total gallons of distillate fuel oil used for the previous calendar month using the daily records; and 2) The 12-month rolling sum of total gallons of distillate fuel oil used for the previous 12-month period by summing the monthly total gallons of distillate fuel oil used for the previous 12 months. [Minn. R. 7007.0800, subps. 4-5]
EQUI 22	**Degreaser (modified)**
5.6.1	The Permittee shall limit n-propylbromide, also known as 1-Bromopropane <= 6.5 tons per year 12-month rolling sum. [Minn. R. 7007.0800, subp 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]
5.6.2	The Permittee shall not use TCE in EQUI 22. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a(a)]
5.6.3	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. [Minn. R. 7011.0715, subp. 1(A)]
5.6.4	Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)]
5.6.5	The Permittee shall ensure that EQUI 22 be designed or operated to have a reduced room draft as described in 40 CFR Section 63.463(e)(2)(ii). [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a(a)]
5.6.6	The Permittee shall ensure that EQUI 22 has a freeboard ratio of 1.0. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a(a)]
5.6.7	The Permittee shall use the following control combination: Freeboard ratio of 1.0, reduced room draft, and superheated vapor. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a(a)]
5.6.8	The Permittee shall ensure that the temperature of the solvent vapor at the center of the superheated vapor zone is at least 10 degrees F above the solvent's boiling point. An exceedance has occurred if the above requirement has not been met and is not corrected within 15 days of detection. Adjustments or repairs shall be made to EQUI 22 to reestablish required levels. The parameter must be re-measured immediately upon adjustment or repair and demonstrated to be within required limits. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.9	EQUI 22 shall have an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minute (11 feet per minute) or less from the initial loading of parts through removal of cleaned parts. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.10	EQUI 22 shall be equipped with a vapor level control device that shuts off the sump heat if the vapor level in EQUI 22 rises above the height of the primary condenser. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.11	EQUI 22 shall have a primary condenser. [Minn. R. 7007.0800, sub. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.12	The parts baskets or the parts being cleaned in an open-top batch vapor cleaning machine shall not occupy more than 50 percent of the solvent/air interface area unless the parts baskets or parts are introduced at a speed of 0.9 meters per minute (3 feet per minute) or less. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.13	The Permittee shall complete any spraying operations within the vapor zone or within a section of EQUI 22 that is not directly exposed to the ambient air (i.e., a baffled or enclosed area of the solvent cleaning machine). [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.14	The Permittee shall orient parts so that the solvent drains from them freely. Parts having cavities or

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	blind holes shall be tipped or rotated before being removed from EQUI 22 unless an equally effective approach has been approved by the Commissioner. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.15	The Permittee shall not remove parts baskets or parts from EQUI 22 until dripping has stopped. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.16	During startup of EQUI 22, the Permittee shall turn on the primary condenser before the sump heater. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.17	During shutdown of EQUI 22, the Permittee shall turn off the sump heater and allow the solvent vapor layer to collapse before the primary condenser is turned off. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.18	When solvent is added or drained from EQUI 22, the Permittee shall transfer the solvent using threaded or other leakproof couplings and locate the end of the pipe in the solvent sump beneath the liquid solvent surface. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.19	The Permittee shall maintain EQUI 22 as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the Commissioner's satisfaction to achieve the same or better results as those recommended by the manufacturer. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.20	The Permittee shall collect and store waste solvent, still bottoms, and sump bottoms in closed containers. The closed containers may contain a device that would allow pressure relief, but would not allow liquid solvent to drain from the container. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.21	The Permittee shall not clean sponges, fabric, wood, and paper products. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.22	The Permittee shall ensure that the manufacturer's specifications for determining the minimum proper dwell time within the superheated vapor system are followed. An exceedance has occurred if the above requirement has not been met. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.23	The Permittee shall ensure that parts remain within the superheated vapor for at least the minimum proper dwell time. An exceedance has occurred if the above requirement has not been met. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.24	The Permittee shall use a thermometer or thermocouple to measure the temperature at the center of the superheated solvent vapor zone while EQUI 22 is in the idling mode. The temperature shall be monitored and the results recorded on a weekly basis. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.25	The Permittee shall monitor the hoist speed as described below: (1) Determine the hoist speed by measuring the time it takes for the hoist to travel a measured distance. The speed is equal to the distance in meters or feet divided by the time in minutes (meters or feet per minute, respectively). (2) The monitoring shall be conducted monthly. If after the first year, no exceedances of the hoist speed are measured, the Permittee may begin monitoring the hoist speed quarterly. (3) If an exceedance of the hoist speed occurs during quarterly monitoring, the monitoring frequency

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	returns to monthly until another year of compliance without an exceedance is demonstrated. (4) If the Permittee can demonstrate to the Commissioner's satisfaction in the initial compliance report that the hoist cannot exceed a speed of 11 feet per minute (3.4 meters permit minute), the required monitoring frequency is quarterly, including during the first year of compliance. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.26	The Permittee can use alternative monitoring procedures approved by the Commissioner. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.27	Clean Liquid Solvent: The Permittee shall, on the first operating day of every month, ensure that EQUI 22 contains only clean liquid solvent. This includes, but is not limited to, fresh unused solvent, recycled solvent, and used solvent that has been cleaned of soiled materials. A fill line must be indicated during the first month the measurements are made. The solvent level within EQUI 22 must be returned to the same fill-line each month, immediately prior to calculating monthly emissions as specified in Monthly Solvent Emissions Equation, below. EQUI 22 does not have to be emptied and filled with fresh unused solvent prior to the calculations. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.28	Solvent Additions/Deletions Log: The Permittee shall maintain a log of solvent additions and deletions for EQUI 22. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.29	Monthly Solvent Emissions Equation: The Permittee shall, on the first operating day of the month, using the records of all solvent additions and deletions for the previous month, determine solvent emissions (E) from EQUI 22 using the following equation: E= SAi - LSRi - SSRi Where: E = The total solvent emissions from EQUI 22 during the most recent month i, (kilograms of solvent per month) SAi = The total amount of liquid solvent added to EQUI 22 during the most recent month i, (kilograms of solvent per month) LSRi = The total amount of liquid solvent removed from EQUI 22 during the most recent month i, (kilograms of solvent per month) SSRi = The total amount of solvent removed from EQUI 22 in solid waste, obtained as described in Solid Solvent Removed, below, during the most recent month i, (kilograms of solvent per month). [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.30	Solid Solvent Removed (SSR): The Permittee shall, on the first operating day of the month, determine SSRi using the method specified in (i) or (ii) below: (i) From tests conducted using EPA reference method 25d; or (ii) By engineering calculations included in the compliance report. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.31	12-month rolling total (ET): The Permittee shall on the first operating day of the month, after 12 months of emissions data are available, determine the 12-month rolling total emissions, ET, for the 12-month period ending with the most recent month using the equation below: ET = Sum (E) If 12 months of emissions data are not available, the Permittee shall on the first operating day of the month determine the extrapolated 12-month rolling total emissions, (ETunit)j, for the j-month period ending with the most recent month using the equation below:

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	(ETunit)j = Sum (Eunit) * 12/j, from j=1 to 12 Where: ETunit = The total solvent emissions over the preceding 12 months, (kilograms of solvent emissions per 12-month period). Eunit = solvent emissions for each month (j) for the most recent 12 months, (kilograms of solvent per month). (ETunit)j = The predicted total solvent emissions over the initial 12 months, (kilograms of solvent emissions per 12-month period). j = The number of months of operating data available. If (ETunit)j exceeds the annual usage limit in 5.6.1, the Permittee shall take corrective action(s) to ensure the annual limit is not exceeded. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.32	The Permittee shall maintain records specified below either in electronic or written form for a period of 5 years: (1) The dates and amounts of solvent that are added to EQUI 22. (2) The solvent composition of wastes removed from EQUI 22 as determined using the Solid Solvent Removed (SSR) procedure above. (3) Calculation sheets showing how monthly emissions and the 12-month rolling total emissions from EQUI 22 were determined, and the results of all calculations. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.33	The Permittee shall maintain the following records, in written or electronic form, for the lifetime of EQUI 22: - Owner's manuals, or if not available, written maintenance and operating procedures, for EQUI 22. - The date of installation for EQUI 22. - Records of the solvent content for each solvent used in EQUI 22. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.34	The Permittee shall maintain the following records, in written or electronic form, for a period of 5 years: - Information on the actions taken to comply with requirements in this permit on EQUI 22. This information shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels. - Records of visual inspections. - Estimates of annual solvent consumption for EQUI 22. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.35	The annual report shall include an estimate of the solvent consumption for EQUI 22 during the reporting period. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.36	Exceedance: If the applicable emission limit presented in requirement 5.6.1 of this permit is not met, an exceedance has occurred. All exceedances shall be reported as described below in "exceedance report.". [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.37	The exceedance report shall include: (1) Information on actions taken to comply with requirements of this permit on EQUI 22, including records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels. (2) If an exceedance has occurred, the reason for the exceedance and a description of the actions

Requirement number	Requirement and citation
	taken. (3) If no exceedances of a parameter have occurred, or if a piece of equipment has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.38	If the Permittee is required to submit an exceedance report on a quarterly (or more frequent) basis, the Permittee may reduce the frequency of reporting to semiannual if the conditions below are met: (1) The source has demonstrated a full year of compliance without an exceedance. (2) The Permittee continues to comply with all relevant recordkeeping and monitoring requirements specified herein. (3) The Commissioner does not object to a reduced frequency of reporting for the affected source. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
5.6.39	Hours <= 8000 hours 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. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]
5.6.40	Hours: Daily Recordkeeping. On each day of operation, the Permittee shall calculate, record, and maintain a record of the total hours of operation. This shall be based on written logs or hour meter readings. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]
5.6.41	Hours: Monthly Recordkeeping. By the 15th of the month, the Permittee shall calculate and record the following: 1) The total hours of operation for the previous calendar month using the daily records; and 2) The 12-month rolling sum hours of operation for the previous 12-month period by summing the monthly hours of operation for the previous 12 months. [Minn. R. 7007.0800, subps. 4-5]
EQUI 32	**TriChrome - Copper/Nickel/Chrome Line**
5.7.1	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. [Minn. R. 7011.0715, subp. 1(A)]
5.7.2	Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)]
5.7.3	40 CFR pt. 63, subp. N is an Applicable Requirement under Minn. R. 7007.0100, subp. 7(D); however, this standard is not delegated to MPCA. [Minn. R. 7007.0100, subp. 7(D)]
5.7.4	The affected source to which the provisions of 40 CFR pt. 63, subp. N apply is each chromium electroplating or chromium anodizing tank at facilities performing hard chromium electroplating, decorative chromium electroplating, or chromium anodizing. [40 CFR 63.340(a), Minn. R. 7011.7120]
5.7.5	At all times, the Permittee must operate and maintain any affected source subject to the requirements of 40 CFR pt. 63, subp. N, 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 Permittee to make any further efforts to reduce emissions if levels required by 40 CFR pt. 63, subp. N 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. [40 CFR 63.342(a)(1), Minn. R. 7011.7120]
5.7.6	A decorative chromium electroplating tank that uses a trivalent chromium bath that incorporates a wetting agent as a bath ingredient is subject to the recordkeeping and reporting requirements of 40 CFR Section 63.346(b)(14) and 40 CFR Section 63.347(i). The wetting agent must be an ingredient in the trivalent chromium bath components purchased from vendors. [40 CFR 63.342(e)(1), Minn. R. 7011.7120]
5.7.7	After September 21, 2015, the Permittee shall not add PFOS-based fume suppressants to any affected

Requirement number	Requirement and citation
	decorative chromium electroplating tank. [40 CFR 63.342(e)(2), Minn. R. 7011.7120]
5.7.8	The Permittee of an existing affected source shall comply with the requirements in 40 CFR Section 63.342 by and after the compliance dates specified in 40 CFR Section 63.343(a). [40 CFR 63.342(a)(2), Minn. R. 7011.7120]
5.7.9	If the Permittee operates the trivalent chromium bath without incorporating a wetting agent as a bath ingredient, it is subject to the standards of 40 CFR Section 63.342(d). If the Permittee ceases using a trivalent chromium bath that incorporates a wetting agent, the reporting requirements of 40 CFR Section 63.347(i)(3) must be fulfilled, and the applicable emission limitation must be complied with within the timeframe specified in 40 CFR Section 63.343(a)(7). [40 CFR 63.342(e)(3) & (4), Minn. R. 7011.7120]
5.7.10	The emission limitations in 40 CFR Section 63.342 apply during tank operation as defined in 40 CFR Section 63.341, and during periods of startup and shutdown as these are routine occurrences for affected sources subject to 40 CFR pt. 63, subp. N. In response to an action to enforce the standards set forth in this subpart, the owner or operator may assert a defense to a claim for civil penalties for violations of such standards that are caused by a malfunction, as defined in 40 CFR Section 63.2. Appropriate penalties may be assessed, however, if the Permittee fails to meet the burden of proving all the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief. [40 CFR 63.342(b)(1), Minn. R. 7011.7120]
5.7.11	To establish the affirmative defense in any action to enforce such a standard, the Permittee must timely meet the reporting requirements of 40 CFR Section 63.342(b)(1)(ii), and must prove by a preponderance of evidence the items described in 40 CFR Section 63.342(b)(1)(i). [40 CFR 63.342(b)(1)(i), Minn. R. 7011.7120]
5.7.12	The Permittee seeking to assert an affirmative defense shall submit a written report to the Commissioner with all necessary supporting documentation, that it has met the requirements set forth in 40 CFR Section 63.342(b)(1)(i). This affirmative defense report shall be included in the first periodic compliance, deviation report or excess emission report otherwise required after the initial occurrence of the violation of the relevant standard (which may be the end of any applicable averaging period). If such compliance, deviation report or excess emission report is due less than 45 days after the initial occurrence of the violation, the affirmation defense report may be included in the second compliance, deviation report or excess emission report due after the initial occurrence of the violation of the relevant standard. [40 CFR 63.342(b)(1)(ii), Minn. R. 7011.7120]
5.7.13	The Permittee shall maintain the following records for each affected source: 1. Records of the bath components purchased, with the wetting agent clearly identified as a bath constituent contained in one of the components. [40 CFR 63.342(e)(1), 40 CFR 63.346(a), 40 CFR 63.346(b)(14), Minn. R. 7011.7120]
5.7.14	All records shall be maintained for a period of 5 years in accordance with 40 CFR Section 63.10(b)(1). [40 CFR 63.346(a), 40 CFR 63.346(c), Minn. R. 7011.7120]
5.7.15	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(c)(1); 40 CFR 63.1(c)(2); 40 CFR 63.2; 40 CFR 63.3; 40 CFR 63.4(a);

Requirement number	Requirement and citation
	40 CFR 63.4(b); 40 CFR 63.4(c); 40 CFR 63.5(a); 40 CFR 63.5(b); 40 CFR 63.5(d); 40 CFR 63.5(e); 40 CFR 63.6(a)(1); 40 CFR 63.6(b)(2); 40 CFR 63.6(c)(1); 40 CFR 63.6(c)(2); 40 CFR 63.6(f); 40 CFR 63.6(g); 40 CFR 63.7(a)(3); 40 CFR 63.7(e); 40 CFR 63.7(g); 40 CFR 63.8(b)(1); 40 CFR 63.8(f); 40 CFR 63.9(c); 40 CFR 63.9(i); 40 CFR 63.9(j); 40 CFR 63.10(a)(5); 40 CFR 63.10(a)(6); 40 CFR 63.10(a)(7); 40 CFR 63.10(b)(1); 40 CFR 63.10(d)(1); 40 CFR 63.10(f); 40 CFR 63.12; 40 CFR 63.13; 40 CFR 63.14; 40 CFR 63.15(a); and 40 CFR 63.15(b). A copy of 40 CFR pt. 63, subp. A is included in Appendix C. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than 3 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 63.340(b), 40 CFR pt. 63, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-1500, Minn. R. 7011.7000, Minn. R. 7011.7120, Minn. R. 7017.1010 & 7017.2025, Minn. R. 7019.0100]
EQUI 259	**Parts Washer**
5.8.1	EQUI 259 is not permitted to operate. If the Permittee would like to operate this unit, the Permittee must submit an amendment to change the solvent type to a solvent other than TCE and to add the appropriate requirements. [Minn. R. 7007.0800, subp. 2]
STRU 25	**Building Exhaust Fan**
5.9.1	The Permittee shall limit the Air Flow Rate <= 100,000 cubic feet per minute The VFD for the building exhaust fan must be programmed to limit the fan operation. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, 4a(a), Minn. Stat. 116.385, subd. 3]
5.9.2	The Permittee must limit Cadmium <= 0.0000518 pounds per hour. [Minn. R. 7007.0080, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]
5.9.3	The Permittee must limit Cobalt <= 0.0000140 pounds per hour. [Minn. R. 7007.0080, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]

Requirement number	Requirement and citation
5.9.4	The Permittee must limit Chromium, Hexavalent (as Cr) <= 0.000196 pounds per hour. [Minn. R. 7007.0080, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]
5.9.5	The Permittee must limit Nickel, Total (as Ni) <= 0.000133 pounds per hour. [Minn. R. 7007.0080, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]
5.9.6	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the building exhaust fan equipment components. The Permittee shall maintain a written record of these inspections and deviations from proper operation. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subps. 4-5]

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.

Requirement number	Requirement and citation
TFAC 1	**Co-operative Plating Co**
6.1.1	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)]
6.1.2	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)]
6.1.3	The Permittee must submit a notification of reclassification: Due within 15 calendar days after permit issuance. Submit the name and address of the Permittee, the address of the affected source, an identification of the major source and area source standards being reclassified from and to, respectively, and date of effectives of the reclassification. The notification must be submitted electronically to Compliance and Emissions Data Reporting Interface (CEDRI) via https://cdx.epa.gov/. [40 CFR 63.12(c), 40 CFR 63.9(b)(1)(ii), 40 CFR 63.9(j) and (k)]
COMG 14	**Plating and Polishing Operations (NESHAP WWWWWW)**
6.2.1	The Permittee shall prepare an annual certification of compliance report. The annual certification of compliance shall only be submitted if a deviation from the requirements of 40 CFR pt. 63, subp. WWWWWW occur during the reporting year. Each annual compliance report must be prepared no later than January 31 of the year immediately following the reporting period. If a deviation has occurred during the year, each annual compliance report shall be submitted along with the deviation report, and postmarked or delivered no later than January 31 of the year immediately following the reporting period. [40 CFR 63.11509(c), 40 CFR 63.11509(c)(7)]
EQUI 22	**Degreaser (modified)**
6.3.1	The Permittee shall submit an annual report: Due annually, by the 1st of February. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
6.3.2	The Permittee shall submit a solvent emission report: Due annually, by the 1st of February. The Permittee shall submit a solvent emission report every year. This solvent emission report shall contain the requirements specified below:

Requirement number	Requirement and citation
	(1) The average monthly solvent consumption for the affected facility in kilograms per month; (2) The 12-month rolling total solvent emission estimates calculated each month using the Monthly Solvent Emissions Equation requirement and the 12-month rolling total (ETunit); AND (3) This report shall be combined with the annual report required in 6.2.1 into a single report for each facility. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
6.3.3	The Permittee shall submit an exceedance report: Due semiannually, by the 30th of January and July. The Permittee shall submit an exceedance report to the Commissioner semiannually except when the Commissioner determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source, or an exceedance occurs. Once an exceedance has occurred, the Permittee shall follow a quarterly reporting format until a request to reduce reporting frequency is approved. Exceedance reports shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. [Minn. R. 7007.0800, subp. 2(B), Minn. Stat. 116.07, subd. 4a]
6.3.4	The Permittee shall submit a major amendment application: Due within 120 days of submitting a revised, approved nPB AERA. The amendment application shall specify any nPB reduction methods and, if needed, other changes in facility operations selected to reduce risk from the Permittee's emissions of nPB such that its limit can be increased. In the amendment application the Permittee shall include the approved nPB AERA, certified stack testing results if they were used to revise the AERA, and proposed permit conditions to ensure the facility modifications are maintained (i.e., pressure drop on a stack fan to ensure an increased flowrate is maintained). This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7007.0800, subp. 16(L), Minn. Stat. 116.07, subd. 4a(a)]
6.3.5	If the Permittee selects facility modification(s), such as raising the stack height or decreasing the stack diameter, to reduce risk from the Permittee's emissions of nPB, the Permittee shall submit a notification of the date construction began on the modification(s) identified in the nPB AERA: Due 30 calendar days after Date of Construction Start. Submit the name and number of the Subject Item and the date construction began. The notification shall be submitted electronically on Form CS-02. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7007.0800, subp. 16(L), Minn. Stat. 116.07, subd. 4a(a)]
6.3.6	If the Permittee selects a nPB reduction method such as routing to existing control equipment or other modification(s) in the nPB AERA, the Permittee shall submit a notification of the actual date of the completion of each change(s) identified in the nPB AERA: Due 15 calendar days after completing each selected modification(s). If the change(s) affects existing equipment, submit the name and number of the Subject Item(s) affected. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act. [Minn. R. 7007.0800, subp. 2(B), Minn. R. 7007.0800, subp. 16(L), Minn. Stat. 116.07, subd. 4a(a)]
STRU 25	**Building Exhaust Fan**
6.4.1	Cadmium: The Permittee shall conduct an initial performance test due 180 calendar days after permit issuance every 60 months thereafter to measure emissions at the STRU 25 outlet. The Commissioner will set the subsequent test frequency as stated in a Notice of Compliance (NOC) or Notice of Verification (NOV) letter with review of the initial performance test. Subsequent tests shall

Requirement number	Requirement and citation
	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 18, 320, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to the performance test due date will not reset the test due date for future testing as required by this permit or within a Notice of Compliance letter. Testing conducted more than 60 days prior to the performance test due date satisfies this test due date requirement but will reset future performance test due dates based on the performance test date. [Minn. R. 7007.0800, subp. 4, Minn. R. 7017.2020, subp. 1]
6.4.2	Cobalt: The Permittee shall conduct an initial performance test due 180 calendar days after permit issuance every 60 months thereafter to measure emissions at the STRU 25 outlet. The Commissioner will set the subsequent test frequency as stated in a Notice of 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 18, 320, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to the performance test due date will not reset the test due date for future testing as required by this permit or within a Notice of Compliance letter. Testing conducted more than 60 days prior to the performance test due date satisfies this test due date requirement but will reset future performance test due dates based on the performance test date. [Minn. R. 7007.0800, subp. 4, Minn. R. 7017.2020, subp. 1]
6.4.3	Chromium, Hexavalent (as Cr): The Permittee shall conduct an initial performance test due 180 calendar days after permit issuance every 60 months thereafter to measure emissions at the STRU 25 outlet. The Commissioner will set the subsequent test frequency as stated in a Notice of 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.

Requirement number	Requirement and citation
	The performance test shall be conducted at worst-case conditions 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 18, 320, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to the performance test due date will not reset the test due date for future testing as required by this permit or within a Notice of Compliance letter. Testing conducted more than 60 days prior to the performance test due date satisfies this test due date requirement but will reset future performance test due dates based on the performance test date. [Minn. R. 7007.0800, subp. 4, Minn. R. 7017.2020, subp. 1]
6.4.4	Nickel, Total (as Ni): The Permittee shall conduct an initial performance test due 180 calendar days after permit issuance every 60 months thereafter to measure emissions at the STRU 25 outlet. The Commissioner will set the subsequent test frequency as stated in a Notice of 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 18, 320, or other method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to the performance test due date will not reset the test due date for future testing as required by this permit or within a Notice of Compliance letter. Testing conducted more than 60 days prior to the performance test due date satisfies this test due date requirement but will reset future performance test due dates based on the performance test date. [Minn. R. 7007.0800, subp. 4, Minn. R. 7017.2020, subp. 1]
6.4.5	Air Flow Rate: The Permittee shall conduct an initial performance test due 180 calendar days after permit issuance and every 60 months thereafter to verify the air flow rate at the STRU 25 outlet. The Commissioner will set the subsequent test frequency as stated in a Notice of 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. The performance test shall be conducted with the Building Exhaust Fan operating at air flow rates ranging from 15,000 cfm to 100,000 cfm using a method approved by MPCA in the performance test plan approval. Testing conducted during the 60 days prior to the performance test due date will not reset the test due date for future testing as required by this permit or within a Notice of Compliance letter. Testing conducted more than 60 days prior to the performance test due date satisfies this test due date requirement but will reset future performance test due dates based on the performance test date. [Minn. R. 7007.0800, subp. 4, Minn. R. 7017.2020, subp. 1]

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.

Minn. R.	Rule description of the activity	General applicable requirement
Minn. R. 7007.1300, subp. 3(B)(1)	Infrared electric ovens The facility has four electric ovens, 3 large and 1 small, for hydrogen embrittlement prevention of plated parts such as high strength and low-alloy steel, nickel, and titanium alloys.	Opacity <= 20% (Minn. R. 7011.0110)
Minn. R. 7007.1300, subp. 3(E)	Brazing, soldering, torch-cutting, and/or welding equipment	PM, variable depending on airflow Opacity <= 20% (Minn. R. 7011.0715)
Minn. R. 7007.1300, subp. 3(F)	Individual units with potential emissions less than 2000 lb/year of certain pollutants Alkaline cleaner waste tank, hydrochloric acid waste tank, ammoniacal acid waste tank, spent chromate tank, cyanide dragout tank, and spent nitric acid tank, Black Oxide Oven	PM, variable depending on airflow Opacity <= 20% (Minn. R. 7011.0715)

Appendix B. TCE and nPB AERA Parameters

The table below provides the point source parameters to be used as the benchmark for future risk analyses as described in Section 5 and Section 6. The building exhaust fan air flow rates were modeled at 15,000, 30,000, 70,000 and 100,000 cfm with 100,000 cfm being the worst-case scenario for emissions. Many different operating scenarios were evaluated. Scenario 1 shows the parameters used in the original 2019 submittal that passed the AERA review. Scenario 2 shows the parameters used if all facility emissions are vented to STRU 25 and the wet scrubber is not operating. Scenarios 2, 4, and 5 show the parameters used if the facility vents to both STRU 25 and STRU 4 (at three different air flow rates) if the wet scrubber is not operating. Scenarios 3, 4, and 5 did not model TCE since the permit will be issued after the TCE Ban is enforced. Scenarios 3, 4, and 5 also used a larger safety factor of 40 percent versus the other scenarios that used 25 percent.

Table 1 – STRU Dimensions

	Stack Height * (ft)	Diameter (ft)	Stack Temperature (^{0}F / K)	Stack Flow Rate (ft^3/min)	Discharge Direction	Rainhat
STRU 2 (Boilers)	25.25	1.67	70 / 294.3	3,000	Up	No
STRU 4 (EQUI 22)	13	0.67	70 / 294.3	100	Up	No
STRU 5 (TREA 2)	38	4	70 / 294.3	44,000	Up	No
STRU 25 (Building Fan)	38	6	70 / 294.3	100,000	Up	No

*Stack height added to main manufacturing building height of 20 ft. STRU 4 has been removed and EQUI 22 now vents to either STRU 25 or STRU 5 (TREA 2).

Table 2 – AERA Emission Rate (lb/hr)

	TCE	nPB	Cd	Cr(VI) aerosols	Cr(VI) particulate	Co	Ethyl Benzene	Ni	Toluene
Scenario 1 - 2019 RASS									
STRU 2	-	-	3.00E-05	-	2.72E-06	1.00E-06	5.00E-06	3.00E-05	4.46E-04
STRU 4	-	-	2.23E-05	5.01E-05	-	6.03E-06	-	1.03E-04	-
STRU 25	0.02	3.59	2.39E-05	9.06E-05	-	6.46E-06	-	6.17E-04	-
Scenario 2 -100,000 cfm Fan Vent Only – No Scrubber Vent									
STRU 2	-	-	3.00E-05	-	2.72E-06	1.00E-06	5.00E-06	3.00E-05	4.46E-04
STRU 5	-	-	-	-	-	-	-	-	-
STRU 25	0.02	3.59	4.63E-05	1.75E-05	-	1.25E-06	-	1.19E-04	-
Scenario 3 - 40,000 cfm Fan Vent – Scrubber not Operating									
STRU 2	-	-	3.00E-05	-	2.72E-06	1.00E-06	5.00E-06	3.00E-05	4.46E-04
STRU 5	-	-	2.71E-05	1.03E-04	-	7.33E-06	-	6.99E-04	-
STRU 25	-	3.59	2.47E-05	9.33E-05	-	6.67E-06	-	6.36E-04	-
Scenario 4 - 70,000 cfm Fan Vent – Scrubber not Operating									
STRU 2	-	-	3.00E-05	-	2.72E-06	1.00E-06	5.00E-06	3.00E-05	4.46E-04
STRU 5	-	-	2.00E-05	7.56E-05	-	5.40E-06	-	5.15E-04	-
STRU 25	-	3.59	3.18E-05	1.20E-04	-	8.60E-06	-	8.20E-04	-
Scenario 5 - 100,000 cfm Fan Vent – Scrubber not Operating									
STRU 2	-	-	3.00E-05	-	2.72E-06	1.00E-06	5.00E-06	3.00E-05	4.46E-04
STRU 5	-	-	1.58E-05	5.99E-05	-	4.28E-06	-	4.08E-04	-
STRU 25	-	3.59	3.60E-05	1.36E-05	-	9.72E-06	-	9.27E-04	-

Table 3 – AERA Total Annual Emission Rate (tpy)

	TCE	nPB	Cd	Cr(VI) aerosols	Cr(VI) particulate	Co	Ethyl Benzene	Ni	Toluene
Scenario 1 - 2019 RASS									
Total	0.0876	6.5	3.35E-04	6.16E-04	1.2E-05	5.90E-05	2.00E-05	3.28E-03	1.96E-03
Scenario 2 -100,000 cfm Fan Vent Only – No Scrubber Vent									
Total	0.0876	6.5	3.35E-04	7.67E-04	1.2E-05	5.90E-05	2.00E-05	5.34E-03	1.96E-03
Scenario 3 - 40,000 cfm Fan Vent – Scrubber not Operating									
Total	-	6.5	3.39E-04	7.85E-04	1.2E-05	6.00E-05	2.00E-05	5.47E-03	1.96E-03
Scenario 4 - 70,000 cfm Fan Vent – Scrubber not Operating									
Total	-	6.5	3.39E-04	7.82E-04	1.2E-05	6.00E-05	2.00E-05	5.47E-03	1.96E-03
Scenario 5 - 100,000 cfm Fan Vent – Scrubber not Operating									
Total	-	6.5	3.39E-04	7.84E-04	1.2E-05	6.00E-05	2.00E-05	5.47E-03	1.96E-03

Appendix C. 40 CFR Part 63, Subpart 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.

(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

m3 = cubic meter

mg = milligram = 10^{-3} gram

ml = milliliter = 10^{-3} liter

mm = millimeter = 10^{-3} meter

Mg = megagram = 106 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

ft2 = square feet

ft3 = 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

yd2 = 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 an 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 not 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 use the application for reclassification with the regulatory authority (*e.g.,* permit application) to fulfill the requirements of this paragraph. 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 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). Anything submitted using CEDRI cannot later be claimed to be CBI. Although we do not expect persons to assert a claim of CBI, if persons wish to assert a CBI, submit a complete notification or report, including information claimed to be CBI, to the EPA. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium 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 file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph

(k). All CBI claims must be asserted at the time of submission. Furthermore, under section 114(c) of the Act emissions data is not entitled to confidential treatment and requires EPA to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available.

(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.

§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 = $$1.740\times10^{-7}\left(\frac{1}{ppmv}\right)\left(\frac{g\text{-mole}}{scm}\right)\left(\frac{MJ}{kcal}\right)$$

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 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 §§63.11173(e) and 63.11516(d).

(2) [Reserved]

(e) 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, tables 4 and 5 of subpart UUUUU, table 1 to subpart ZZZZZ, and table 4 to subpart JJJJJJ.

(2) [Reserved]

(f) 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-P2O5 or Ca3(PO4)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-P2O5 or Ca3(PO4)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-P2O5 or Ca3(PO4)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-P2O5, 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-P2O5, 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-P2O5, Method C—Spectrophotometric Method, IBR approved for §63.606(f), §63.626(f), and (g).

(2) [Reserved]

(g) 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).

(h) 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 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.

(64) 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).

(65) 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.

(66) 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).

(67) 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).

(68) 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.

(69) ASTM D5192-09, Standard Practice for Collection of Coal Samples from Core, (Approved June 1, 2009), IBR approved for table 6 to subpart DDDDD.

(70) 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.

(71) ASTM D5228-92, Standard Test Method for Determination of Butane Working Capacity of Activated Carbon, (Reapproved 2005), IBR approved for §63.11092(b).

(72) 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.

(73) 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.

(74) 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.

(75) 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.

(76) 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.

(77) 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).

(78) 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.

(79) 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).

(80) 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).

(81) 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.

(82) 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).

(83) 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.

(84) 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.

(85) 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.

(86) 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, and §§63.7142(a) and (b) and 63.8000(d).

(87) 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.

(88) 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.

(89) 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).

(90) [Reserved]

(91) 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.

(92) 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.

(93) 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.

(94) 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).

(95) 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).

(96) 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).

(97) 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.

(98) 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.

(99) 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.

(100) 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.

(101) 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.

(102) 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), and 63.11647(a) and (d) and 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, table 5 to subpart UUUUU, and appendix A to subpart UUUUU.

(103) 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.

(104) 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).

(105) ASTM D7430-11ae1, Standard Practice for Mechanical Sampling of Coal, (Approved October 1, 2011), IBR approved for table 6 to subpart DDDDD.

(106) 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), and 63.7833(g).

(107) 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).

(108) ASTM E145-94 (Reapproved 2001), Standard Specification for Gravity-Convection and Forced-Ventilation Ovens, IBR approved for appendix A to subpart PPPP.

(109) 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).

(110) ASTM E260-91, General Practice for Packed Column Gas Chromatography, IBR approved for §§63.750(b) and 63.786(b).

(111) ASTM E260-96, General Practice for Packed Column Gas Chromatography, IBR approved for §§63.750(b) and 63.786(b).

(112) ASTM E515-95 (Reapproved 2000), Standard Test Method for Leaks Using Bubble Emission Techniques, IBR approved for §63.425(i).

(113) 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.

(114) 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.

(115) 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.

(116) ASTM UOP539-12, Refinery Gas Analysis by GC, Copyright 2012 (to UOP), IBR approved for §63.670(j).

(i) 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]

(j) 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.

(k) 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).

(l) 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]

(m) 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).

(n) U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue NW., Washington, DC 20460, (202) 272-0167, *http://www.epa.gov.*

(1) EPA-450/3-88-018, Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations, December 1988, 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) 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), and 63.11224(f).

(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), and 63.11224(f).

(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.

(o) 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.

(p) 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).

(q) 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, Specificiations, 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," dated December 1996, 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]

(r) 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]

(s) 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]

(t) 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 NOTES: 1. 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.*

2. At 85 FR 40760, July 7, 2020, §63.14 was amended by revising paragraphs (h)(91) and (93). However, due to inaccurate amendatory instruction, the revisions could not be incorporated.

3. At 85 FR 40606, July 7, 2020, §63.14 was amended by revising paragraph (g)(2)(i), however, due to an inaccurate amendatory instruction, this revision could not be incorporated.

§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.