

**Technical Support Document
for
Draft Air Emission Permit No. 13900044-101**

This technical support document (TSD) is intended for all parties interested in the draft permit and to meet the requirements that have been set forth by the federal and state regulations (40 CFR § 70.7(a)(5) and Minn. R. 7007.0850, subp. 1). The purpose of this document is to provide the legal and factual justification for each applicable requirement or policy decision considered in the preliminary determination to issue the draft permit.

1. General information

1.1 Applicant and stationary source location

Table 1. Applicant and source address

Applicant/Address	Stationary source/Address (SIC Code: 1422 - Crushed and Broken Limestone)
Carmeuse Company 12051 Yosemite Ave S Savage, Minnesota 55378-1314	Superior Minerals Co 12051 Yosemite Ave S Savage, MN 55378
Contact: Raymond Rummel Phone: 219-292-5206	

1.2 Facility description

Superior Minerals Co (Facility) is a non-metallic mineral processing facility that receives and processes limestone for various construction and industrial applications. The raw material is received via barge, unloaded and either stockpiled, transported to other facilities, or used for purposes unrelated to the facility. Stockpiled material is loaded into feed hoppers where it may be dried, crushed, and screened to customer specifications. Screened product that is oversize is either re-crushed and screened to specification or sent to storage piles. Fine powder product is collected using cyclones and baghouses. Processed material is stored in bins for blending and storage prior to loadout where it is bagged and/or loaded into trucks for distribution.

Emission units at the facility include dryers, crushers/mills, screens, conveyors, classifiers/separators, cyclones, bucket elevators, storage bins, and truck loadout. Fugitive emissions sources include storage piles, feed hoppers, front end loading, truck/hopper loading, barge unloading, and traffic on unpaved roads. Insignificant activities at the facility include fuel use for space heating, welding, and parts washing. Emissions from the facility are primarily particulate matter (PM) particulate matter with an aerodynamic diameter less than 10 micrometers (PM₁₀) and particulate matter with an aerodynamic diameter less than 2.5 microns (PM_{2.5}). Other pollutant emissions from the facility include those associated with combustion of distillate oil and natural gas by dryers and space heating. Pollution control measures include water sprays that saturate material prior to processing and water sprays to reduce the occurrence of fugitive dust from truck traffic as described in the Fugitive Dust Control Plan.

1.3 Description of the activities allowed by this permit action

This permit action is for an individual state permit. This permit includes five additional amendments as described below.

2015 Administrative Amendment - Permit No. 13900044-002 incorrectly stated the name of the facility as "Superior Minerals Corp-Savage". This amendment was to change the name on the permit to "Superior Minerals Company". The company ownership full name is "Superior Minerals Company, A Colorado Limited Liability Company (LLC)". There were no operational or physical changes to the facility requested as part of this application.

2015 Minor Amendment - Superior Minerals installed an additional loadout bin (EQUI 160) that will be used to hold a limestone product that cannot be comingled with other product. The bin will be used in-series with other bins in the load out area. The throughput for the process may be directed to one or multiple bins depending on the facility's needs. Emissions from the new bin will be vented through the existing duct system, and there will not be an increase in airflow to the duct system.

2018 Minor Amendment - Superior Minerals installed a pet coke unloading operation (EQUIs 131-143) that is unrelated to the main operations of the facility. Pet coke will be brought into the facility via truck on an existing paved road and unloaded to a conveyor. The pet coke will then be loaded from a stacker conveyor onto a pile located inside a 3-sided hoop building. The pet coke will be loaded from the pile into a hopper conveyor system by front end loader also located inside the 3-sided hoop building. The pet coke will then be transported via conveyor to the barge loading area, where it will be loaded onto a barge.

2025 Administrative Amendment - This administrative amendment changes ownership of the facility from Superior Minerals Company, a Colorado LLC to Carmeuse Company which is the new operator of the facility. The bill of sale agreement was between Carmeuse Midwest, LLC (the purchaser) and Linwood Mining and Mineral Corp (the seller) and made effective as of August 25, 2021.

2025 Major Amendment - This major amendment revises the pressure drop range on EQUI 156 (Dust System #8) to ≥ 0.50 and ≤ 10.0 inches water following the most recent performance test.

1.4 Description of notifications and applications included in this action

Table 2. Notifications and applications included in this action

Date received	Application/Notification type and description
04/20/2026	Major Amendment (IND20260001)
01/15/2025	Administrative Amendment (IND20250001)
10/30/2018 (including supplemental information received 4/23/2019)	Minor Amendment (IND20180001)
12/11/2015	Minor Amendment (IND20150002)
08/17/2015	Administrative Amendment (IND20150001)
09/15/2010 (including supplemental information received 10/28/2025)	Part 70 Reissuance (IND20100001) later amended to a state individual permit

1.5 Facility emissions

Table 3. Total facility potential to emit summary

	PM tpy	PM ₁₀ tpy	PM _{2.5} tpy	SO ₂ tpy	NO _x tpy	CO tpy	CO _{2e} tpy	VOC tpy	Single HAP** tpy	All HAPs tpy
Total facility limited potential emissions	139	72.6	36.3	0.46	53.2	27.0	62,100	1.65	0.42	0.51
Total facility actual	61.1	22.5	8.91	0.004	0.749	0.629	*	0.041	*	

emissions (2023)									
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*Not reported in Minnesota emission inventory.

** Hexane

Table 4. Title I emissions summary (2015 Minor Amendment)

Pollutant*	Unlimited potential emissions increase from the modification (tpy)	Limited potential emissions increase from the modification (tpy)	NSR/112(g) threshold for new major source (tpy)	NSR/112(g) review required? (yes/no)
PM	4.52	0.20	250	no
PM ₁₀	0.10	0.03	250	no
PM _{2.5}	0.04	0.17	250	no

*The only pollutant whose emissions change as a result of the modification are particulate matter; no changes to other criteria pollutants are authorized.

Table 5. Title I emissions summary (2018 Minor Amendment)

Pollutant*	Unlimited potential emissions increase from the modification (tpy)	Limited potential emissions increase from the modification (tpy)	NSR/112(g) threshold for new major source (tpy)	NSR/112(g) review required? (yes/no)
PM	58.04	2.30	250	no
PM ₁₀	18.06	0.88	250	no
PM _{2.5}	3.38	0.15	250	no

*The only pollutant whose emissions change as a result of the modification are particulate matter; no changes to other criteria pollutants are authorized.

Table 6. Non-Title I emissions summary (2015 Minor Amendment)

Pollutant**	After change (lb/hr)	Before change (lb/hr)	Net change* (lb/hr)	Insignificant modification thresholds (lb/hr <)	Minor and moderate amendment thresholds (lb/hr < or ≥)	Type of amendment (minor or moderate)
PM ₁₀	0.10	0	0.10	0.855	3.42	insignificant

Addition of Bin 34 (EQUI 160).

Table 7. Non-Title I emissions summary (2018 Minor Amendment)

Pollutant**	After change (lb/hr)	Before change (lb/hr)	Net change* (lb/hr)	Insignificant modification thresholds (lb/hr <)	Minor and moderate amendment thresholds (lb/hr < or ≥)	Type of amendment (minor or moderate)
PM ₁₀	1.82	0	1.82	0.855	3.42	minor

*The term 'Net Change' is not equivalent to 'Net Emissions Increase' as defined at 40 CFR Section 52.21(b)(3).

**The only pollutant whose emissions change as a result of the modification are particulate matter; no changes to other criteria pollutants are authorized.

Table 8. Facility classification

Classification	Major	Synthetic minor/area	Minor/Area
New Source Review		X	
Part 70		X	
Part 63			X

1.6 Changes to permit

The permit does not authorize any specific modifications, however, the MPCA has a combined operating and construction permitting program under Minnesota Rules Chapter 7007, and under Minn. R. 7007.0800, the MPCA has authority to include additional requirements in an operating permit. The following changes to the permit are made through this permit action:

- The permit has been updated to reflect current MPCA templates and standard citation formatting;
- Completed requirements and the requirements for equipment that has been removed have been deleted;
- Subject item details have been updated based on the equipment that was actually installed;
- Some requirements have been reordered or moved to help with clarity;
- Facility emissions were re-evaluated to show the emissions are below major source thresholds for part 70 sources and thus, qualifies as a state permit (see Attachment 1);
- Groups (COMGs) were disbanded, and applicable requirements listed under the appropriate EQUI;
- The insignificant activities for the facility have been updated to reflect the current activities on site as well as to reflect changes to these rules since the last permit was issued;
- Appendix B was added to the permit to document modeling parameters;
- 40 CFR pt. 60, subps. OOO and A were added as Appendix E and F as referenced in the permit;
- The fugitive dust control plan and general public preclusion plan submitted with the PM₁₀ model are included as Appendix C and D, respectively.

2. Regulatory and/or statutory basis

2.1 New source review (NSR)

The permit carries forward limits on the facility such that it is a minor source under New Source Review regulations. No modifications are authorized by this permit.

2.2 Part 70 permit program

The facility is a synthetic minor source under the Part 70 permit program.

2.3 New source performance standards (NSPS)

The facility is subject to 40 CFR pt. 60, subp. OOO, "Standards of Performance of Nonmetallic Mineral Processing Plants." Regulations under this rule set opacity limits for the following types of emission units: crushers, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed truck or railcar loading stations. Stack emissions from the above emission units defined under 40 CFR pt. 60, subp. OOO include PM emission limits in addition to opacity. The Permittee has stated that no other NSPS standards apply.

2.4 National emission standards for hazardous air pollutants (NESHAP)

The facility is an area source as defined under 40 CFR § 63.2. Therefore, no major source NESHAPs apply. The Permittee has stated that no area source NESHAPs apply to sources at the facility.

2.5 Regulatory Overview

Table 9. Regulatory overview of facility

Subject item*	Applicable regulations	Rationale
TFAC 1	Minn. R. 7007.0800, subp. 2(A)	Moisture content limit for feed material.

Subject item*	Applicable regulations	Rationale
EQUIs 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 18, 24, 25, 26, 29, 30, 31, 33, 42, 48, 50, 57, 59, 60, 61, 63, 64, 71, 72, 73, 74, 75, 76, 77, 80, 82, 86, 92, 94, 95, 96, 101, 102, 105, 106, 107, 108, 109, 110, 126, and 127 (Pre 2008 Equipment)	40 CFR pt. 60, subp. OOO, Minn. R. 7011.3350	New Source Performance Standards. Limits set on PM and opacity for stack emissions from crushers, grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, and enclosed truck or railcar loading stations, or from any other affected facility constructed, reconstructed, or modified after August 31, 1983 and before April 22, 2008.
EQUI 93 (Rock Breaker Stamler)	40 CFR pt. 60, subp. OOO, Minn. R. 7011.3350	New Source Performance Standards. Limits set on opacity for crushers that do not vent to capture systems constructed, reconstructed, or modified after August 31, 1983 and before April 22, 2008.
EQUIs 2, 53, 54 and 103 (Conveyors, Dock Target Hopper)	40 CFR pt. 60, subp. OOO, Minn. R. 7011.3350	New Source Performance Standards. Limits set on opacity for grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, and enclosed truck or railcar loading stations, or from any other affected facility that does not vent to capture systems constructed, reconstructed, or modified after August 31, 1983 and before April 22, 2008.
EQUIs 116, 118, 119, 120, 121, 122, 123, 124, 125, 128, 129, 130, and 160 (Post 2008 Equipment)	40 CFR pt. 60, subp. OOO, Minn. R. 7011.3350	New Source Performance Standards. Limits set on opacity for grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, and enclosed truck or railcar loading stations, or from any other affected facility that does not vent to capture systems constructed, reconstructed, or modified after April 22, 2008.
EQUIs 1, 2, 3, 4, 5, 18, 24, 25, 29, 30, 31, 53, 54, 55, 80, 82, 86, 87, 93, 96, 98, 99, 116, 118, 119, 120, 121, 122, 123, 124 and 125, and FUGI 45	Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)	National Ambient Air Quality Standards Throughput limits taken to assure compliance with PM ₁₀ NAAQS.
EQUIs 6, 29, 33, 36, 41 and 55 (Burners, Heaters, Dryers)	Minn. R. 7011.0610	Standards of Performance for Direct Heating Equipment. • Construction of the unit was on or after July 9, 1969; • The unit burns gaseous fuel; • The facility is located in the Twin Cities; and • The facility has less than or equal to 250 MMBtu/hr of indirect and direct heating equipment.
EQUIs 81, 87, 88, 89, 90, 91, 98, 99, 100, 104, 131, 132, 133, 134, 135, 143 and 159 (Cyclones, Dust System, Transporter Bins, Classifiers, Pet Coke Handling)	Minn. R. 7011.0715	Standards of Performance for post-1969 Industrial Process Equipment. Equipment for which there is no other promulgated performance standard is subject to the opacity and PM limits in this rule. Construction of the unit was on or after July 9, 1969.

Subject item*	Applicable regulations	Rationale
EQUIs 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, and 158 (Product Capture Equipment)	Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) & Minn. R. 7007.3000, Avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200	Prevention of Significant Deterioration. Operating parameter requirements to limit PM, PM ₁₀ and PM _{2.5} PTE to avoid major source classification under PSD and Part 70.

*Location of the requirement in the permit (e.g., EQUI 1, STRU 2, etc.).

3. Technical information

3.1 Calculations of potential to emit (PTE)

As discussed above, this permit includes the 2015 and 2018 Minor Amendments and PM₁₀ dispersion model completed as part of this permit action. Each of these activities have calculations showing how each affects emissions from units at the facility. While the minor amendment application calculations demonstrate which amendment is required by rule, the dispersion model calculations show the emissions that are allowed from the facility to maintain compliance with ambient air quality standards, known as “allowable emissions”. The Permittee demonstrated compliance with PM₁₀ NAAQS without assuming limitations on operations; therefore, allowable emissions are equal to the facility’s PTE. Descriptions of how PTE was calculated for each source (as defined under 40 CFR § 60.671) are included in the proceeding section.

Attachment 1 to this TSD contains a summary of the PTE of the Facility as well as detailed spreadsheets and supporting information prepared by the MPCA and the Permittee.

Attachment 1 to this TSD also contains the Title I net emissions increase calculations for this modification. This demonstrates that this modification is not a major modification for PSD. Also included are the non-Title I calculations for this modification that demonstrate that the modification qualifies for a moderate amendment under Minn. R. 7007.1450.

3.1.1 Crushers

Emissions from the crushers were calculated with a mass balance approach using emission factors from AP-42 FIRE. The factor for crushing with wet suppression was used because the plant has federally enforceable requirements to maintain 1.5 percent minimum moisture content on feed material.

3.1.2 Screens

Emissions from the screening operations were calculated with a mass balance approach using emission factors from AP-42 FIRE. Two products are screened at the facility, limestone and top soil, each with their own emission factor. The factor for screening with wet suppression for both products was used because the plant has federally enforceable requirements to maintain 1.5 percent minimum moisture content on feed material, including water sprays.

Several screens at the plant process material that is treated with wet suppression systems due to being downstream from either wet cyclones or water spray bars.

3.1.3 Conveyors

Emissions from conveying operations were calculated with a mass balance approach with emission factors from AP-42 FIRE. These calculations were the same as calculations for topsoil screening since they use the same emission factor under the same operating conditions.

Several downstream conveyors have emissions from their drop points controlled by water carry-over from water spray bars.

3.1.4 Fugitive sources

The facility has several sources that contribute to fugitive emissions including, but not limited to, material transport, front-end loading, truck traffic on paved and unpaved roads, stockpile erosion, drilling, blasting, and grading. With the exception of blasting, and paved and unpaved road truck traffic, emissions were calculated with a mass balance approach with emission factors from AP-42 FIRE. For paved and unpaved truck traffic, the emission factors had to be calculated using the equations taken from other sectors (e.g., western surface coal mining). Emission factors for blasting were either unavailable or not representative of the industry and, therefore, not included in the modeling demonstration.

3.1.5 Emissions controls

The facility utilizes water sprays for fugitive road dust, water spray bars at EQUI 78 and 62 drop points, water sprays to control emissions from stockpile wind erosion, and limits on minimum moisture content of feed material for control of fugitive particulate emissions from affected facilities subject to 40 CFR pt. 60, subp. 000. Fugitive road dust (paved and unpaved), drilling, blasting, grading, front-end loading, and stockpile wind erosion control methods are specified and enforced by the Fugitive Dust Control Plan (Appendix C). Controls are required to be operated at all times affected units downstream from them are operating. If they malfunction, units downstream must be shut down until corrective actions are completed and recorded as required by this permit.

3.2 Dispersion modeling

The Permittee completed air dispersion modeling to show modeled compliance with the PM₁₀ national ambient air quality standards (NAAQS). Several operating restrictions were assumed when the modeling was conducted and have been incorporated as permit limits. In addition, per MPCA practice, a table of the modeled parameters has been added to the permit as an appendix. The parameters listed in Appendix B of the permit describe the operation of the facility at maximum capacity. In other words, the flow rates and temperatures listed in Appendix B represent the minimum parameters at the maximum emission rates. The purpose of listing the parameters in the permit appendix is to provide a benchmark for determining if and when additional modeling is required.

Table 10. Modeling Results

Pollutant	Avg period	NAAQS (ug/m ³)	MAAQS (ug/m ³)	Result (ug/m ³)	% of NAAQS	% of MAAQS
PM ₁₀	24-hr	150.0	150.0	148.65	99.10%	99.10%

3.3 Ambient Air Boundary

In the air dispersion modeling analysis, the Permittee omitted receptors on portions of the facility property. These portions of the atmosphere accessible on the facility property must be excluded from ambient air. The Permittee maintains security fencing along the entire facility perimeter and a controlled access gate. This fence line defines the ambient air boundary used for siting receptors in the air dispersion modeling analysis. The MPCA has determined that the existing security fencing is sufficient to establish an ambient air boundary, based on guidance contained in the 1980 letter from the US Environmental Protection Agency (EPA) Administrator Douglas Costle to Senator Jennings Randolph and the March 28, 2017 MPCA Memorandum "Clarification of MPCA Working Practice to Evaluate the Federal Definition of Ambient Air in Air Quality Dispersion Modeling." (Appendix D to MPCA Air Dispersion Modeling Practices Manual). This determination is also consistent with the US EPA November 2018 Draft "Revised Policy On Exclusions from 'Ambient Air'." This permit requires the Permittee to comply with a general public preclusion plan (Appendix D), which must be maintained onsite. The Permittee must document any security breaches, as well as identify any security deficiencies and update the Plan accordingly to prevent future breaches. Appendix D to the permit includes a map depicting the ambient air boundary defined by the fence line.

3.4 Performance Tests

Table 11. Performance Test Results

Unit Tested	Date	Limit	Result	Compliance
Limestone Conveyor 1 (EQUI 116)	10/13/2025	7% opacity	6.25%	Compliant
Limestone Conveyor 3 (EQUI 118)	10/13/2025	7% opacity	4.38%	Compliant
Limestone Conveyor 4 (EQUI 119)	10/13/2025	7% opacity	5.83%	Compliant
Limestone Conveyor 5 (EQUI 120)	10/13/2025	7% opacity	5.0%	Compliant
Limestone Conveyor 6 (EQUI 121)	10/13/2025	7% opacity	0.0%	Compliant
Limestone Conveyor 7 (EQUI 122)	10/13/2025	7% opacity	5.63%	Compliant
Limestone Conveyor 8 (EQUI 123)	10/13/2025	7% opacity	1.25%	Compliant
Limestone Conveyor 9 (EQUI 124)	10/13/2025	7% opacity	0.63%	Compliant
Limestone Conveyor 10 (EQUI 125)	10/13/2025	7% opacity	5.0%	Compliant
Conveyor (EU143)	8/18/2009	7% opacity	0.42%	Compliant
Conveyor (EU144)	8/18/2009	7% opacity	0.0%	Compliant
Conveyor (EU145)	8/18/2009	7% opacity	0.0%	Compliant
Conveyor (EU146)	8/18/2009	7% opacity	0.83%	Compliant
Conveyor (EU147)	8/18/2009	7% opacity	1.25%	Compliant
Conveyor (EU148)	8/18/2009	7% opacity	0.63%	Compliant
Conveyor (EU149)	8/18/2009	7% opacity	0.0%	Compliant
Conveyor (EU150)	8/18/2009	7% opacity	0.21%	Compliant
Conveyor (EU151)	8/18/2009	7% opacity	0.0%	Compliant
Dust Collector (DS001)	10/4-5/2006	7% opacity	0.0%	Compliant
Dust Collector (DS015)	10/4-5/2006	7% opacity	0.0%	Compliant

3.5 Documentation of Decisions on Requirements Library

For this permit, the following standard profiles were used:

1. General Total Facility Requirements>Part 70 Permits
2. Modeling and Ambient Monitoring>Modeling-Criteria Pollutant>Have Modeled>With remodeling requirements
3. Control Equipment>Emission Unit Requirements
4. Source Specific Limits>Subject Item Restrictions>Process Throughput Limits
5. Federal Requirements>NSPS>OOO>Pre-2008>Not Crushers
6. Federal Requirements>NSPS>OOO>On or after 2008>Not Crushers
7. Minnesota Performance Stds>Direct Heating Equipment>On or after July 9, 1969>PM Limit
8. Minnesota Performance Stds>Industrial Process Equipment>On or after July 9, 1969>PM Limit
9. Performance Testing>Emission Rate Testing>Recurring Tests>Opacity
10. Control Equipment>No CAM>Fabric Filter w/o CE Rule>No ARM for Pressure Drop

3.6 Monitoring

In accordance with the Clean Air Act, it is the responsibility of the owner or operator of a facility to have sufficient knowledge of the facility to certify that the facility is in compliance with all applicable requirements.

In evaluating the monitoring included in the permit, the MPCA considered the following:

- the likelihood of the facility violating the applicable requirements;
- whether add-on controls are necessary to meet the emission limits;
- the variability of emissions over time;
- the type of monitoring, process, maintenance, or control equipment data already available for the emission unit;
- the technical and economic feasibility of possible periodic monitoring methods; and
- the kind of monitoring found on similar units elsewhere.

The Table below summarizes the monitoring requirements.

Table 12. Monitoring

Subject Item*	Requirement (basis)	What is the monitoring?	Why is this monitoring adequate?
TFAC 1	Moisture content $\geq 1.5\%$ of feed material [Minn. R. 7007.0800, subp. 2(A)]	Moisture content testing, sampling, recordkeeping	Testing of the moisture content of each material source using American Society for Testing and Materials (ASTM) methods D 2216-92 or D 4643-93 (or equivalent) along with recordkeeping allows for compliance with the limit. If moisture content is below the limit, operate a moisture addition device to achieve a greater than 1.5% moisture content of feed material.
EQUIs 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 18, 24, 25, 26, 29, 30, 31, 33, 42, 48, 50, 57, 59, 60, 61, 63, 64, 71, 72, 73, 74, 75, 76, 77, 80, 82, 86, 92, 94, 95, 96, 101, 102, 105, 106, 107, 108, 109, 110, 126 and 127 (Pre 2008 Equipment)	Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), Minn. R. 7011.3350] Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. 000, Table 2, Minn. R. 7011.3350]	Daily VE check, pressure drop reading	Monitoring required by 40 CFR pt. 60, subp. 000 is adequate to demonstrate compliance with the requirements of the standard because this standard was promulgated after November 15, 1990, and post-November 15, 1990, NSPS contain adequate monitoring requirements.
EQUI 93 (Rock Breaker Stamler)	Opacity ≤ 15 percent opacity. [40 CFR 60.672(b), 40 CFR pt. 60, subp. 000, Table 3, Minn. R. 7011.3350]	Daily VE check, pressure drop reading	Monitoring required by 40 CFR pt. 60, subp. 000 is adequate to demonstrate compliance with the requirements of the standard because this standard was promulgated after November 15, 1990, and post-November 15, 1990, NSPS contain adequate monitoring requirements.
EQUIs 2, 53, 54 and 103 (Conveyors, Dock Target Hopper)	Opacity ≤ 10 percent opacity. [40 CFR 60.672(b), 40 CFR pt. 60, subp. 000, Table 3, Minn. R. 7011.3350]	Daily VE check, pressure drop reading	Monitoring required by 40 CFR pt. 60, subp. 000 is adequate to demonstrate compliance with the requirements of the standard because this standard was promulgated after November 15, 1990, and post-November 15, 1990, NSPS contain adequate monitoring requirements.

Subject Item*	Requirement (basis)	What is the monitoring?	Why is this monitoring adequate?
EQUIs 116, 118, 119, 120, 121, 122, 123, 124, 125, 128, 129, 130 and 160 (Post 2008 Equipment)	Opacity <= 7 percent opacity. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO, Table 3, Minn. R. 7011.3350]	Daily VE check, pressure drop reading, performance testing	Monitoring required by 40 CFR pt. 60, subp. OOO is adequate to demonstrate compliance with the requirements of the standard because this standard was promulgated after November 15, 1990, and post-November 15, 1990, NSPS contain adequate monitoring requirements. Recurring performance testing and periodic monitoring to ensure continuous compliance with the standard. Testing frequencies are typically set at 12, 36, or 60-month increments. Past test results, applicable rules, potential emissions, location of source, and past compliance history play a factor in setting the testing frequency. This permit requires opacity testing 180 days following permit issuance date and every 60 months thereafter.
EQUIs 6, 29, 33, 36, 41 and 55 (Burners, Heaters, Dryers)	Particulate Matter <= 0.30 grains per dry standard cubic foot [Minn. R. 7011.0610, subp. 1(A)(1)]	None	Based on material moisture content and throughput limitations, these units are not expected to exceed the allowable particulate limit.
	Opacity <= 20% with exceptions [Minn. R. 7011.0610, subp. 1(A)(2)]	None	Based on material moisture content and throughput limitations, these units are not expected to exceed the allowable opacity limit.
EQUIs 81, 87, 88, 89, 90, 91, 98, 99, 100, 104, 131, 132, 133, 134, 135, 143 and 159 (Cyclones, Dust System, Transporter Bins, Classifiers, Pet Coke Handling)	Particulate Matter <= 0.30 grains per dry standard cubic foot [Minn. R. 7011.0715, subp. 1(A)]	None	Based on material moisture content and throughput limitations, these units are not expected to exceed the allowable particulate limit.
	Opacity <= 20 percent opacity [Minn. R. 7011.0715, subp. 1(B)]	None	Based on material moisture content and throughput limitations, these units are not expected to exceed the allowable opacity limit.
EQUIs 53, 116, 118, 119, 120, 121, 122, 123, 124 and 125 (Dock Target Hopper, Limestone Conveyors)	Throughput <= 7500.0 tons per day 24-hr block avg [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]	Daily records of material throughput	Daily records of material throughput and 24-hr block average of material throughput are adequate to show compliance with the limit.

Subject Item*	Requirement (basis)	What is the monitoring?	Why is this monitoring adequate?
FUGI 45 (Uncaptured emissions from Truck (Hopper) Loader)	Throughput <= 1000.0 tons per day 24-hr block avg [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]	Daily records of material throughput	Daily records of material throughput and 24-hr block average of material throughput are adequate to show compliance with the limit.
EQUIs 1, 54, 55 and 80 (Conveyors)	Throughput <= 110.0 tons per hour 24-hr block avg [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]	Daily records of material throughput	Daily records of material throughput and 24-hr block average of material throughput are adequate to show compliance with the limit.
EQUIs 24 and 25 (Leg #4 Bucket Elevator, Bin 1 CC20)	Throughput <= 75.0 tons per hour 24-hr block avg [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]	Daily records of material throughput	Daily records of material throughput and 24-hr block average of material throughput are adequate to show compliance with the limit.
EQUIs 2, 3, 4, 5, 18, 29, 30, 31, 82, 86, 87, 93 and 96 (Handling Equipment)	Throughput <= 50.0 tons per hour 24-hr block avg [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]	Daily records of material throughput	Daily records of material throughput and 24-hr block average of material throughput are adequate to show compliance with the limit.

Subject Item*	Requirement (basis)	What is the monitoring?	Why is this monitoring adequate?
EQUIs 98 and 99 (Transporters)	Throughput <= 40.0 tons per hour 24-hr block avg [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]	Daily records of material throughput	Daily records of material throughput and 24-hr block average of material throughput are adequate to show compliance with the limit.
EQUI 144 (Dryer Dust System Vent)	Pressure Drop >= 1.50 and <= 8.0 inches of water [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) & Minn. R. 7007.3000, Avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]	Daily and periodic inspections, pressure drop monitoring, visible emissions, operation and maintenance, corrective actions, and recordkeeping	Monitoring based on the Minnesota Performance Standard for Control Equipment provides a reasonable assurance of compliance.
EQUI 145 (Raymond Mill Dust System)	Pressure Drop >= 1.50 and <= 10.0 inches of water [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) & Minn. R. 7007.3000, Avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]		
EQUI 146 (DL60 Power Loading)	Pressure Drop >= 1.50 and <= 10.0 inches of water [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) & Minn. R. 7007.3000, Avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]		

Subject Item*	Requirement (basis)	What is the monitoring?	Why is this monitoring adequate?
EQUI 147 (Ultrafine Bin Vent System)	Pressure Drop $\geq$ 0.50 and $\leq$ 8.0 inches of water [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) & Minn. R. 7007.3000, Avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]		
EQUI 148 (Dust System #22)	Pressure Drop $\geq$ 1.50 and $\leq$ 10.0 inches of water [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) & Minn. R. 7007.3000, Avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]		
EQUI 149 (Lehigh Slag Dryer System)	Pressure Drop $\geq$ 1.50 and $\leq$ 8.0 inches of water [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) & Minn. R. 7007.3000, Avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]		
EQUI 150 (Dust System #25)	Pressure Drop $\geq$ 1.50 and $\leq$ 10.0 inches of water [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) & Minn. R. 7007.3000, Avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]		

Subject Item*	Requirement (basis)	What is the monitoring?	Why is this monitoring adequate?
EQUI 151 (Bin 25 Dust System)	Pressure Drop $\geq$ 0.50 and $\leq$ 8.0 inches of water [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) & Minn. R. 7007.3000, Avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]		
EQUI 152 (Bin 20 Dust System)	Pressure Drop $\geq$ 0.50 and $\leq$ 8.0 inches of water [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) & Minn. R. 7007.3000, Avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]		
EQUI 153 (Williams Mill Dust System)	Pressure Drop $\geq$ 1.50 and $\leq$ 10.0 inches of water [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) & Minn. R. 7007.3000, Avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]		
EQUI 154 (Dust System #2)	Pressure Drop $\geq$ 0.50 and $\leq$ 8.0 inches of water [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) & Minn. R. 7007.3000, Avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]		

Subject Item*	Requirement (basis)	What is the monitoring?	Why is this monitoring adequate?
EQUI 155 (Dust System #3)	Pressure Drop $\geq$ 1.50 and $\leq$ 8.0 inches of water [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) & Minn. R. 7007.3000, Avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]		
EQUI 156 (Dust System #8)	Pressure Drop $\geq$ 0.50 and $\leq$ 10.0 inches of water [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) & Minn. R. 7007.3000, Avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]		
EQUI 157 (Dust System #11)	Pressure Drop $\geq$ 0.50 and $\leq$ 8.0 inches of water [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) & Minn. R. 7007.3000, Avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]		
EQUI 158 (Bradley Dolomite Circuit)	Pressure Drop $\geq$ 0.50 and $\leq$ 8.0 inches of water [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) & Minn. R. 7007.3000, Avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]		

*Location of the requirement in the permit (e.g., EQUI 1, STRU 2, etc.).

3.7 Insignificant activities

Superior Minerals Co has several operations which are classified as insignificant activities under the MPCA's permitting rules. These are listed in Appendix A to the permit.

The permit is required to include periodic monitoring for all emissions units, including insignificant activities, per EPA guidance. The insignificant activities at this Facility are only subject to general applicable requirements. Using the criteria outlined earlier in this TSD, the following table documents the justification why no additional periodic monitoring is necessary for the current insignificant activities. See Attachment 1 of this TSD for PTE information for the insignificant activities.

Table 13. Insignificant activities

Insignificant activity	General applicable emission limit	Discussion
Fuel Use: space heaters fueled by kerosene, natural gas, or propane, less than 420,000 Btu/hr	PM <= 0.4 lb/MMBtu Opacity <= 20% with exceptions (Minn. R. 7011.0515)	For these units, based on the fuels used and EPA published emissions factors, it is highly unlikely that they could violate the applicable requirement. In addition, these types of units are typically operated and vented inside a building, so testing for PM or opacity is not feasible.
Brazing, soldering, torch-cutting, or welding equipment	PM, variable depending on airflow Opacity <= 20% (Minn. R. 7011.0715)	For these units, based on EPA published emissions factors, it is highly unlikely that they could violate the applicable requirement. In addition, these units are typically operated and vented inside a building, so testing for PM or opacity is not feasible.
Individual units with potential emissions less than 2000 lb/year of certain pollutants	PM, variable depending on airflow Opacity <= 20% (Minn. R. 7011.0715)	For the parts washer, based on EPA published emissions factors, it is highly unlikely that it could violate the applicable requirement. In addition, this unit is operated and vented inside a building, so testing for PM or opacity is not feasible.

3.8 Permit organization

This permit meets the MPCA Tempo Guidance for ordering and grouping of requirements as well as the use of permit appendices.

3.9 Comments received to be completed following public notice and EPA review periods

Public Notice Period: [start date] – [end date]

EPA Review Period: [start date] – [end date]

4. Permit fee assessment

This permit action is the reissuance of an individual Part 70; therefore, no application fees apply under Minn. R. 7002.0016, subp. 1 to the changes that are covered by the reissuance application. However, the permit action rolls in five additional permit applications to which fees do apply. Attachment 4 to this TSD contains the MPCA's assessment of Application and Additional Points used to determine the permit application fee as required by Minn. R. 7002.0019. The action includes the incorporation of NSPS subp. 000 for the added Bin 34 (EQUI 160) and modeling for PM₁₀ 24-hour NAAQS.

5. Conclusion

Based on the information provided by Superior Minerals Co the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 13900044-101 and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff members on permit team: Tarik Hanafy (permit engineer)
 Adriane Lorsung (peer reviewer)
 Margi Mosbeck-Morrison (compliance)
 Brooke Sonnek (enforcement)
 Beckie Olson (data coordinator)
 Laurie O'Brien (administrative support)

Tempo Activities: Major Amendment (IND20260001), Administrative Amendment (IND20250001), Minor Amendment (IND20180001), Minor Amendment (IND20150002), Administrative Amendment (IND20150001), Part 70 Reissuance (State Permit) (IND20100001)

Attachments: 1. PTE summary and emissions increase calculation spreadsheets
 2. Subject item inventory and facility requirements
 3. Modeling Report
 4. Points Calculator

Attachment 1 - PTE Summary and Emissions Increase Calculation Spreadsheets



Facility Emissions Summary
Air Quality Permit Program
Doc Type: Permit Application

1b) Agency Interest ID number: 65

Superior Minerals

Emissions by Source Table

3a) Tempo SI ID number:		EQUI1; STRU1				3a) Tempo SI ID number:		EQUI2				3a) Tempo SI ID number:		EQUI3; STRU16			
3b) Delta ID No.:		EU142; SV014				3b) Delta ID No.:		EU001				3b) Delta ID No.:		EU002; SV001			
3c)	3d)	3e) Potential			3f)	3c)	3d)	3e) Potential			3f)	3c)	3d)	3e) Potential			3f)
Pollutant Name	CAS #	Pounds (lbs) per hour	tons per year un-restricted	tons per year limited	Actual tons per year	Pollutant Name	CAS #	Pounds (lbs) per hour	tons per year un-restricted	tons per year limited	Actual tons per year	Pollutant Name	CAS #	Pounds (lbs) per hour	tons per year un-restricted	tons per year limited	Actual tons per year
PM	--	0.003	0.014	0.014		PM	--	0.007	0.031	0.031		PM	--	0.020	0.085	0.085	
PM ₁₀	--	0.001	0.005	0.005		PM ₁₀	--	0.002	0.010	0.010		PM ₁₀	--	0.008	0.033	0.033	
PM _{2.5}	--	0.001	0.005	0.005		PM _{2.5}	--	0.001	0.003	0.003		PM _{2.5}	--	0.008	0.033	0.033	
SO ₂	--	--	--	--		SO ₂	--	--	--	--		SO ₂	--	--	--	--	
NO _x	--	--	--	--		NO _x	--	--	--	--		NO _x	--	--	--	--	
VOC	--	--	--	--		VOC	--	--	--	--		VOC	--	--	--	--	
CO	--	--	--	--		CO	--	--	--	--		CO	--	--	--	--	
Lead	7439-92-1	--	--	--		Lead	7439-92-1	--	--	--		Lead	7439-92-1	--	--	--	
GHGs:						GHGs:						GHGs:					
N ₂ O (mass)	--	--	--	--		N ₂ O (mass)	--	--	--	--		N ₂ O (mass)	--	--	--	--	
CH ₄ (mass)	--	--	--	--		CH ₄ (mass)	--	--	--	--		CH ₄ (mass)	--	--	--	--	
CO ₂ (mass)	--	--	--	--		CO ₂ (mass)	--	--	--	--		CO ₂ (mass)	--	--	--	--	
CO ₂ e	--	--	--	--		CO ₂ e	--	--	--	--		CO ₂ e	--	--	--	--	
HAPs:						HAPs:						HAPs:					
Acrolein	107-02-8	--	--	--		Acrolein	107-02-8	--	--	--		Acrolein	107-02-8	--	--	--	
Benzene	71-43-2	--	--	--		Benzene	71-43-2	--	--	--		Benzene	71-43-2	--	--	--	
Bis (2-ethylhexyl) phth	117-81-7	--	--	--		Bis (2-ethylhexyl) phth	117-81-7	--	--	--		Bis (2-ethylhexyl) phth	117-81-7	--	--	--	
1,3-Butadiene	106-99-0	--	--	--		1,3-Butadiene	106-99-0	--	--	--		1,3-Butadiene	106-99-0	--	--	--	
Chlorine	7782-50-5	--	--	--		Chlorine	7782-50-5	--	--	--		Chlorine	7782-50-5	--	--	--	
Chlorobenzene	108-90-7	--	--	--		Chlorobenzene	108-90-7	--	--	--		Chlorobenzene	108-90-7	--	--	--	
Chloroform	67-66-3	--	--	--		Chloroform	67-66-3	--	--	--		Chloroform	67-66-3	--	--	--	
1,4-Dichlorobenzene	106-46-7	--	--	--		1,4-Dichlorobenzene	106-46-7	--	--	--		1,4-Dichlorobenzene	106-46-7	--	--	--	
Ethylbenzene	100-41-4	--	--	--		Ethylbenzene	100-41-4	--	--	--		Ethylbenzene	100-41-4	--	--	--	
Ethylene dichloride (1,1,2,2-tetrachloroethane)	107-06-2	--	--	--		Ethylene dichloride (1,1,2,2-tetrachloroethane)	107-06-2	--	--	--		Ethylene dichloride (1,1,2,2-tetrachloroethane)	107-06-2	--	--	--	
Formaldehyde	50-00-0	--	--	--		Formaldehyde	50-00-0	--	--	--		Formaldehyde	50-00-0	--	--	--	
Hexachlorobenzene	118-74-1	--	--	--		Hexachlorobenzene	118-74-1	--	--	--		Hexachlorobenzene	118-74-1	--	--	--	
Hexane	110-54-3	--	--	--		Hexane	110-54-3	--	--	--		Hexane	110-54-3	--	--	--	
Hydrogen chloride	7647-01-0	--	--	--		Hydrogen chloride	7647-01-0	--	--	--		Hydrogen chloride	7647-01-0	--	--	--	
Methanol	67-56-1	--	--	--		Methanol	67-56-1	--	--	--		Methanol	67-56-1	--	--	--	
Methyl bromide (Bromomethane)	74-83-9	--	--	--		Methyl bromide (Bromomethane)	74-83-9	--	--	--		Methyl bromide (Bromomethane)	74-83-9	--	--	--	
Methyl chloride (Chloromethane)	74-87-3	--	--	--		Methyl chloride (Chloromethane)	74-87-3	--	--	--		Methyl chloride (Chloromethane)	74-87-3	--	--	--	
Naphthalene	91-20-3	--	--	--		Naphthalene	91-20-3	--	--	--		Naphthalene	91-20-3	--	--	--	
Phenol	108-95-2	--	--	--		Phenol	108-95-2	--	--	--		Phenol	108-95-2	--	--	--	
POM	--	--	--	--		POM	--	--	--	--		POM	--	--	--	--	
Propylene oxide	75-56-9	--	--	--		Propylene oxide	75-56-9	--	--	--		Propylene oxide	75-56-9	--	--	--	
Styrene	100-42-5	--	--	--		Styrene	100-42-5	--	--	--		Styrene	100-42-5	--	--	--	
Toluene	108-88-3	--	--	--		Toluene	108-88-3	--	--	--		Toluene	108-88-3	--	--	--	
Vinyl chloride	75-01-4	--	--	--		Vinyl chloride	75-01-4	--	--	--		Vinyl chloride	75-01-4	--	--	--	
p-Xylene	95-47-6	--	--	--		p-Xylene	95-47-6	--	--	--		p-Xylene	95-47-6	--	--	--	
m,p-Xylene	--	--	--	--		m,p-Xylene	--	--	--	--		m,p-Xylene	--	--	--	--	
Antimony	7440-36-0	--	--	--		Antimony	7440-36-0	--	--	--		Antimony	7440-36-0	--	--	--	
Arsenic	7440-38-2	--	--	--		Arsenic	7440-38-2	--	--	--		Arsenic	7440-38-2	--	--	--	
Beryllium	7440-41-7	--	--	--		Beryllium	7440-41-7	--	--	--		Beryllium	7440-41-7	--	--	--	
Cadmium	7440-43-9	--	--	--		Cadmium	7440-43-9	--	--	--		Cadmium	7440-43-9	--	--	--	
Chromium	7440-47-3	--	--	--		Chromium	7440-47-3	--	--	--		Chromium	7440-47-3	--	--	--	
Cobalt	7440-48-4	--	--	--		Cobalt	7440-48-4	--	--	--		Cobalt	7440-48-4	--	--	--	
Manganese	7439-96-5	--	--	--		Manganese	7439-96-5	--	--	--		Manganese	7439-96-5	--	--	--	
Mercury	7439-97-6	--	--	--		Mercury	7439-97-6	--	--	--		Mercury	7439-97-6	--	--	--	
Nickel	7440-02-0	--	--	--		Nickel	7440-02-0	--	--	--		Nickel	7440-02-0	--	--	--	
Selenium	7782-49-2	--	--	--		Selenium	7782-49-2	--	--	--		Selenium	7782-49-2	--	--	--	
Total HAPs						Total HAPs						Total HAPs					

1a) AQ Facility ID number: 13900044

2) Facility name: Superior Minerals

1b) Agency Interest ID number: 65

Follow the instructions to complete this spreadsheet. This spreadsheet can be copied into a tab for your emissions spreadsheet and must be submitted on a CD with your application. If you need to provide emissions information for more emissions units, add more sets of columns (3a through 3f) to the right as needed in the Emissions by Source table. If you need to provide information for more pollutants, add rows as needed.

Emissions by Source Table

3a) Tempo SI ID number:		EQU14; STRU16				3a) Tempo SI ID number:		EQU15; STRU16				3a) Tempo SI ID number:		EQU16; STRU16			
3b) Delta ID No.:		EU003; SV001				3b) Delta ID No.:		EU004; SV001				3b) Delta ID No.:		EU005; SV001			
3c)	3d)	3e) Potential			3f)	3c)	3d)	3e) Potential			3f)	3c)	3d)	3e) Potential			3f)
Pollutant Name	CAS #	Pounds (lbs) per hour	tons per year un-restricted	tons per year limited	Actual tons per year	Pollutant Name	CAS #	Pounds (lbs) per hour	tons per year un-restricted	tons per year limited	Actual tons per year	Pollutant Name	CAS #	Pounds (lbs) per hour	tons per year un-restricted	tons per year limited	Actual tons per year
PM	--	0.002	0.007	0.007		PM	--	0.002	0.007	0.007		PM	--	2.102	9.207	9.207	
PM ₁₀	--	0.001	0.002	0.002		PM ₁₀	--	0.001	0.002	0.002		PM ₁₀	--	1.777	7.783	7.783	
PM _{2.5}	--	0.001	0.002	0.002		PM _{2.5}	--	0.001	0.002	0.002		PM _{2.5}	--	0.687	3.009	3.009	
SO ₂	--	--	--	--		SO ₂	--	--	--	--		SO ₂	--	6.47E-03	2.83E-02	2.83E-02	
NO _x	--	--	--	--		NO _x	--	--	--	--		NO _x	--	1.078	4.724	4.724	
VOC	--	--	--	--		VOC	--	--	--	--		VOC	--	0.059	0.260	0.260	
CO	--	--	--	--		CO	--	--	--	--		CO	--	0.906	3.968	3.968	
Lead	7439-92-1	--	--	--		Lead	7439-92-1	--	--	--		Lead	7439-92-1	5.39E-06	2.36E-05	2.36E-05	
GHGs:																	
N ₂ O (mass)	--	--	--	--		N ₂ O (mass)	--	--	--	--		N ₂ O (mass)	--	2.43E-03	1.06E-02	1.06E-02	
CH ₄ (mass)	--	--	--	--		CH ₄ (mass)	--	--	--	--		CH ₄ (mass)	--	2.43E-02	1.06E-01	1.06E-01	
CO ₂ (mass)	--	--	--	--		CO ₂ (mass)	--	--	--	--		CO ₂ (mass)	--	1,286.74	5,635.91	5,635.91	
CO ₂ e	--	--	--	--		CO ₂ e	--	--	--	--		CO ₂ e	--	1,288.06	5,641.70	5,641.70	
HAPs:																	
Acrolein	107-02-8	--	--	--		Acrolein	107-02-8	--	--	--		Acrolein	107-02-8	--	--	--	
Benzene	71-43-2	--	--	--		Benzene	71-43-2	--	--	--		Benzene	71-43-2	2.26E-05	9.92E-05	9.92E-05	
Bis (2-ethylhexyl) phth	117-81-7	--	--	--		Bis (2-ethylhexyl) phth	117-81-7	--	--	--		Bis (2-ethylhexyl) phth	117-81-7	--	--	--	
1,3-Butadiene	106-99-0	--	--	--		1,3-Butadiene	106-99-0	--	--	--		1,3-Butadiene	106-99-0	--	--	--	
Chlorine	7782-50-5	--	--	--		Chlorine	7782-50-5	--	--	--		Chlorine	7782-50-5	--	--	--	
Chlorobenzene	108-90-7	--	--	--		Chlorobenzene	108-90-7	--	--	--		Chlorobenzene	108-90-7	--	--	--	
Chloroform	67-66-3	--	--	--		Chloroform	67-66-3	--	--	--		Chloroform	67-66-3	--	--	--	
1,4-Dichlorobenzene	106-46-7	--	--	--		1,4-Dichlorobenzene	106-46-7	--	--	--		1,4-Dichlorobenzene	106-46-7	1.29E-05	5.67E-05	5.67E-05	
Ethylbenzene	100-41-4	--	--	--		Ethylbenzene	100-41-4	--	--	--		Ethylbenzene	100-41-4	--	--	--	
Ethylene dichloride (1,2)	107-06-2	--	--	--		Ethylene dichloride (1,2)	107-06-2	--	--	--		Ethylene dichloride (1,2)	107-06-2	--	--	--	
Formaldehyde	50-00-0	--	--	--		Formaldehyde	50-00-0	--	--	--		Formaldehyde	50-00-0	8.09E-04	3.54E-03	3.54E-03	
Hexachlorobenzene	118-74-1	--	--	--		Hexachlorobenzene	118-74-1	--	--	--		Hexachlorobenzene	118-74-1	--	--	--	
Hexane	110-54-3	--	--	--		Hexane	110-54-3	--	--	--		Hexane	110-54-3	1.94E-02	8.50E-02	8.50E-02	
Hydrogen chloride	7647-01-0	--	--	--		Hydrogen chloride	7647-01-0	--	--	--		Hydrogen chloride	7647-01-0	--	--	--	
Methanol	67-56-1	--	--	--		Methanol	67-56-1	--	--	--		Methanol	67-56-1	--	--	--	
Methyl bromide (Brom)	74-83-9	--	--	--		Methyl bromide (Brom)	74-83-9	--	--	--		Methyl bromide (Brom)	74-83-9	--	--	--	
Methyl chloride (Chlor)	74-87-3	--	--	--		Methyl chloride (Chlor)	74-87-3	--	--	--		Methyl chloride (Chlor)	74-87-3	--	--	--	
Naphthalene	91-20-3	--	--	--		Naphthalene	91-20-3	--	--	--		Naphthalene	91-20-3	6.58E-06	2.88E-05	2.88E-05	
Phenol	108-95-2	--	--	--		Phenol	108-95-2	--	--	--		Phenol	108-95-2	--	--	--	
POM	--	--	--	--		POM	--	--	--	--		POM	--	7.53E-06	3.30E-05	3.30E-05	
Propylene oxide	75-56-9	--	--	--		Propylene oxide	75-56-9	--	--	--		Propylene oxide	75-56-9	--	--	--	
Styrene	100-42-5	--	--	--		Styrene	100-42-5	--	--	--		Styrene	100-42-5	--	--	--	
Toluene	108-88-3	--	--	--		Toluene	108-88-3	--	--	--		Toluene	108-88-3	3.67E-05	1.61E-04	1.61E-04	
Vinyl chloride	75-01-4	--	--	--		Vinyl chloride	75-01-4	--	--	--		Vinyl chloride	75-01-4	--	--	--	
o-Xylene	95-47-6	--	--	--		o-Xylene	95-47-6	--	--	--		o-Xylene	95-47-6	--	--	--	
m,p-Xylene	--	--	--	--		m,p-Xylene	--	--	--	--		m,p-Xylene	--	--	--	--	
Antimony	7440-36-0	--	--	--		Antimony	7440-36-0	--	--	--		Antimony	7440-36-0	--	--	--	
Arsenic	7440-38-2	--	--	--		Arsenic	7440-38-2	--	--	--		Arsenic	7440-38-2	2.16E-06	9.45E-06	9.45E-06	
Beryllium	7440-41-7	--	--	--		Beryllium	7440-41-7	--	--	--		Beryllium	7440-41-7	1.29E-07	5.67E-07	5.67E-07	
Cadmium	7440-43-9	--	--	--		Cadmium	7440-43-9	--	--	--		Cadmium	7440-43-9	1.19E-05	5.20E-05	5.20E-05	
Chromium	7440-47-3	--	--	--		Chromium	7440-47-3	--	--	--		Chromium	7440-47-3	1.51E-05	6.61E-05	6.61E-05	
Cobalt	7440-48-4	--	--	--		Cobalt	7440-48-4	--	--	--		Cobalt	7440-48-4	9.06E-07	3.97E-06	3.97E-06	
Manganese	7439-96-5	--	--	--		Manganese	7439-96-5	--	--	--		Manganese	7439-96-5	4.10E-06	1.79E-05	1.79E-05	
Mercury	7439-97-6	--	--	--		Mercury	7439-97-6	--	--	--		Mercury	7439-97-6	2.80E-06	1.23E-05	1.23E-05	
Nickel	7440-02-0	--	--	--		Nickel	7440-02-0	--	--	--		Nickel	7440-02-0	2.26E-05	9.92E-05	9.92E-05	
Selenium	7782-49-2	--	--	--		Selenium	7782-49-2	--	--	--		Selenium	7782-49-2	2.59E-07	1.13E-06	1.13E-06	
Total HAPs														2.04E-02	8.92E-02	8.92E-02	

GI-07 Spreadsheet

Facility Emissions Summary
Air Quality Permit Program
Doc Type: Permit Application

1a) AQ Facility ID number: 13900044

2) Facility name: Superior Minerals

1b) Agency Interest ID number: 65

Follow the instructions to complete this spreadsheet. This spreadsheet can be copied into a tab for your emissions spreadsheet and must be submitted on a CD with your application. If you need to provide emissions information for more emissions units, add more sets of columns (3a through 3f) to the right as needed in the Emissions by Source table. If you need to provide information for more pollutants, add rows as needed.

Emissions by Source Table

3a) Tempo SI ID number:		EQUI7; STRU16, STRU17, STRU18				3a) Tempo SI ID number:		EQUI8; STRU17				3a) Tempo SI ID number:		EQUI9; STRU17			
3b) Delta ID No.:		EU006; SV001, SV002				3b) Delta ID No.:		EU007; SV002				3b) Delta ID No.:		EU008; SV002			
3c)	3d)	3e) Potential			3f)	3c)	3d)	3e) Potential			3f)	3c)	3d)	3e) Potential			3f)
Pollutant Name	CAS #	Pounds (lbs) per hour	tons per year un-restricted	tons per year limited	Actual tons per year	Pollutant Name	CAS #	Pounds (lbs) per hour	tons per year un-restricted	tons per year limited	Actual tons per year	Pollutant Name	CAS #	Pounds (lbs) per hour	tons per year un-restricted	tons per year limited	Actual tons per year
PM	--	0.001	0.004	0.004		PM	--	0.001	0.004	0.004		PM	--	0.090	0.394	0.394	
PM ₁₀	--	0.000	0.001	0.001		PM ₁₀	--	0.000	0.001	0.001		PM ₁₀	--	0.022	0.095	0.095	
PM _{2.5}	--	0.000	0.001	0.001		PM _{2.5}	--	0.000	0.001	0.001		PM _{2.5}	--	0.022	0.095	0.095	
SO ₂	--	--	--	--		SO ₂	--	--	--	--		SO ₂	--	--	--	--	
NO _x	--	--	--	--		NO _x	--	--	--	--		NO _x	--	--	--	--	
VOC	--	--	--	--		VOC	--	--	--	--		VOC	--	--	--	--	
CO	--	--	--	--		CO	--	--	--	--		CO	--	--	--	--	
Lead	7439-92-1	--	--	--		Lead	7439-92-1	--	--	--		Lead	7439-92-1	--	--	--	
GHGs:						GHGs:						GHGs:					
N ₂ O (mass)	--	--	--	--		N ₂ O (mass)	--	--	--	--		N ₂ O (mass)	--	--	--	--	
CH ₄ (mass)	--	--	--	--		CH ₄ (mass)	--	--	--	--		CH ₄ (mass)	--	--	--	--	
CO ₂ (mass)	--	--	--	--		CO ₂ (mass)	--	--	--	--		CO ₂ (mass)	--	--	--	--	
CO ₂ e	--	--	--	--		CO ₂ e	--	--	--	--		CO ₂ e	--	--	--	--	
HAPs:						HAPs:						HAPs:					
Acrolein	107-02-8	--	--	--		Acrolein	107-02-8	--	--	--		Acrolein	107-02-8	--	--	--	
Benzene	71-43-2	--	--	--		Benzene	71-43-2	--	--	--		Benzene	71-43-2	--	--	--	
Bis (2-ethylhexyl) phth	117-81-7	--	--	--		Bis (2-ethylhexyl) phth	117-81-7	--	--	--		Bis (2-ethylhexyl) phth	117-81-7	--	--	--	
1,3-Butadiene	106-99-0	--	--	--		1,3-Butadiene	106-99-0	--	--	--		1,3-Butadiene	106-99-0	--	--	--	
Chlorine	7782-50-5	--	--	--		Chlorine	7782-50-5	--	--	--		Chlorine	7782-50-5	--	--	--	
Chlorobenzene	108-90-7	--	--	--		Chlorobenzene	108-90-7	--	--	--		Chlorobenzene	108-90-7	--	--	--	
Chloroform	67-66-3	--	--	--		Chloroform	67-66-3	--	--	--		Chloroform	67-66-3	--	--	--	
1,4-Dichlorobenzene	106-46-7	--	--	--		1,4-Dichlorobenzene	106-46-7	--	--	--		1,4-Dichlorobenzene	106-46-7	--	--	--	
Ethylbenzene	100-41-4	--	--	--		Ethylbenzene	100-41-4	--	--	--		Ethylbenzene	100-41-4	--	--	--	
Ethylene dichloride (1,2)	107-06-2	--	--	--		Ethylene dichloride (1,2)	107-06-2	--	--	--		Ethylene dichloride (1,2)	107-06-2	--	--	--	
Formaldehyde	50-00-0	--	--	--		Formaldehyde	50-00-0	--	--	--		Formaldehyde	50-00-0	--	--	--	
Hexachlorobenzene	118-74-1	--	--	--		Hexachlorobenzene	118-74-1	--	--	--		Hexachlorobenzene	118-74-1	--	--	--	
Hexane	110-54-3	--	--	--		Hexane	110-54-3	--	--	--		Hexane	110-54-3	--	--	--	
Hydrogen chloride	7647-01-0	--	--	--		Hydrogen chloride	7647-01-0	--	--	--		Hydrogen chloride	7647-01-0	--	--	--	
Methanol	67-56-1	--	--	--		Methanol	67-56-1	--	--	--		Methanol	67-56-1	--	--	--	
Methyl bromide (Bromine)	74-83-9	--	--	--		Methyl bromide (Bromine)	74-83-9	--	--	--		Methyl bromide (Bromine)	74-83-9	--	--	--	
Methyl chloride (Chlorine)	74-87-3	--	--	--		Methyl chloride (Chlorine)	74-87-3	--	--	--		Methyl chloride (Chlorine)	74-87-3	--	--	--	
Naphthalene	91-20-3	--	--	--		Naphthalene	91-20-3	--	--	--		Naphthalene	91-20-3	--	--	--	
Phenol	108-95-2	--	--	--		Phenol	108-95-2	--	--	--		Phenol	108-95-2	--	--	--	
POM	--	--	--	--		POM	--	--	--	--		POM	--	--	--	--	
Propylene oxide	75-56-9	--	--	--		Propylene oxide	75-56-9	--	--	--		Propylene oxide	75-56-9	--	--	--	
Styrene	100-42-5	--	--	--		Styrene	100-42-5	--	--	--		Styrene	100-42-5	--	--	--	
Toluene	108-88-3	--	--	--		Toluene	108-88-3	--	--	--		Toluene	108-88-3	--	--	--	
Vinyl chloride	75-01-4	--	--	--		Vinyl chloride	75-01-4	--	--	--		Vinyl chloride	75-01-4	--	--	--	
o-Xylene	95-47-6	--	--	--		o-Xylene	95-47-6	--	--	--		o-Xylene	95-47-6	--	--	--	
m,p-Xylene	--	--	--	--		m,p-Xylene	--	--	--	--		m,p-Xylene	--	--	--	--	
Antimony	7440-36-0	--	--	--		Antimony	7440-36-0	--	--	--		Antimony	7440-36-0	--	--	--	
Arsenic	7440-38-2	--	--	--		Arsenic	7440-38-2	--	--	--		Arsenic	7440-38-2	--	--	--	
Beryllium	7440-41-7	--	--	--		Beryllium	7440-41-7	--	--	--		Beryllium	7440-41-7	--	--	--	
Cadmium	7440-43-9	--	--	--		Cadmium	7440-43-9	--	--	--		Cadmium	7440-43-9	--	--	--	
Chromium	7440-47-3	--	--	--		Chromium	7440-47-3	--	--	--		Chromium	7440-47-3	--	--	--	
Cobalt	7440-48-4	--	--	--		Cobalt	7440-48-4	--	--	--		Cobalt	7440-48-4	--	--	--	
Manganese	7439-96-5	--	--	--		Manganese	7439-96-5	--	--	--		Manganese	7439-96-5	--	--	--	
Mercury	7439-97-6	--	--	--		Mercury	7439-97-6	--	--	--		Mercury	7439-97-6	--	--	--	
Nickel	7440-02-0	--	--	--		Nickel	7440-02-0	--	--	--		Nickel	7440-02-0	--	--	--	
Selenium	7782-49-2	--	--	--		Selenium	7782-49-2	--	--	--		Selenium	7782-49-2	--	--	--	
Total HAPs																	

GI-07 Spreadsheet

Facility Emissions Summary
Air Quality Permit Program
Doc Type: Permit Application

1a) AQ Facility ID number: 13900044

2) Facility name: Superior Minerals

1b) Agency Interest ID number: 65

Follow the instructions to complete this spreadsheet. This spreadsheet can be copied into a tab for your emissions spreadsheet and must be submitted on a CD with your application. If you need to provide emissions information for more emissions units, add more sets of columns (3a through 3f) to the right as needed in the Emissions by Source table. If you need to provide information for more pollutants, add rows as needed.

Emissions by Source Table

3a) Tempo SI ID number:		EQUI10; STRU16				3a) Tempo SI ID number:		EQUI11; STRU12, STRU23, STRU27				3a) Tempo SI ID number:		EQUI12; STRU17			
3b) Delta ID No.:		EU009; SV001				3b) Delta ID No.:		EU010; SV008, SV012, SV025				3b) Delta ID No.:		EU011; SV002			
3c)	3d)	3e) Potential			3f)	3c)	3d)	3e) Potential			3f)	3c)	3d)	3e) Potential			3f)
Pollutant Name	CAS #	Pounds (lbs) per hour	tons per year un-restricted	tons per year limited	Actual tons per year	Pollutant Name	CAS #	Pounds (lbs) per hour	tons per year un-restricted	tons per year limited	Actual tons per year	Pollutant Name	CAS #	Pounds (lbs) per hour	tons per year un-restricted	tons per year limited	Actual tons per year
PM	--	0.150	0.657	0.657		PM	--	0.495	2.168	2.168		PM	--	0.396	1.734	1.734	
PM ₁₀	--	0.036	0.158	0.158		PM ₁₀	--	0.080	0.350	0.350		PM ₁₀	--	0.064	0.280	0.280	
PM _{2.5}	--	0.036	0.158	0.158		PM _{2.5}	--	0.030	0.131	0.131		PM _{2.5}	--	0.024	0.105	0.105	
SO ₂	--	--	--	--		SO ₂	--	--	--	--		SO ₂	--	--	--	--	
NO _x	--	--	--	--		NO _x	--	--	--	--		NO _x	--	--	--	--	
VOC	--	--	--	--		VOC	--	--	--	--		VOC	--	--	--	--	
CO	--	--	--	--		CO	--	--	--	--		CO	--	--	--	--	
Lead	7439-92-1	--	--	--		Lead	7439-92-1	--	--	--		Lead	7439-92-1	--	--	--	
GHGs:						GHGs:						GHGs:					
N ₂ O (mass)	--	--	--	--		N ₂ O (mass)	--	--	--	--		N ₂ O (mass)	--	--	--	--	
CH ₄ (mass)	--	--	--	--		CH ₄ (mass)	--	--	--	--		CH ₄ (mass)	--	--	--	--	
CO ₂ (mass)	--	--	--	--		CO ₂ (mass)	--	--	--	--		CO ₂ (mass)	--	--	--	--	
CO ₂ e	--	--	--	--		CO ₂ e	--	--	--	--		CO ₂ e	--	--	--	--	
HAPs:						HAPs:						HAPs:					
Acrolein	107-02-8	--	--	--		Acrolein	107-02-8	--	--	--		Acrolein	107-02-8	--	--	--	
Benzene	71-43-2	--	--	--		Benzene	71-43-2	--	--	--		Benzene	71-43-2	--	--	--	
Bis (2-ethylhexyl) phth	117-81-7	--	--	--		Bis (2-ethylhexyl) phth	117-81-7	--	--	--		Bis (2-ethylhexyl) phth	117-81-7	--	--	--	
1,3-Butadiene	106-99-0	--	--	--		1,3-Butadiene	106-99-0	--	--	--		1,3-Butadiene	106-99-0	--	--	--	
Chlorine	7782-50-5	--	--	--		Chlorine	7782-50-5	--	--	--		Chlorine	7782-50-5	--	--	--	
Chlorobenzene	108-90-7	--	--	--		Chlorobenzene	108-90-7	--	--	--		Chlorobenzene	108-90-7	--	--	--	
Chloroform	67-66-3	--	--	--		Chloroform	67-66-3	--	--	--		Chloroform	67-66-3	--	--	--	
1,4-Dichlorobenzene	106-46-7	--	--	--		1,4-Dichlorobenzene	106-46-7	--	--	--		1,4-Dichlorobenzene	106-46-7	--	--	--	
Ethylbenzene	100-41-4	--	--	--		Ethylbenzene	100-41-4	--	--	--		Ethylbenzene	100-41-4	--	--	--	
Ethylene dichloride (1,2)	107-06-2	--	--	--		Ethylene dichloride (1,2)	107-06-2	--	--	--		Ethylene dichloride (1,2)	107-06-2	--	--	--	
Formaldehyde	50-00-0	--	--	--		Formaldehyde	50-00-0	--	--	--		Formaldehyde	50-00-0	--	--	--	
Hexachlorobenzene	118-74-1	--	--	--		Hexachlorobenzene	118-74-1	--	--	--		Hexachlorobenzene	118-74-1	--	--	--	
Hexane	110-54-3	--	--	--		Hexane	110-54-3	--	--	--		Hexane	110-54-3	--	--	--	
Hydrogen chloride	7647-01-0	--	--	--		Hydrogen chloride	7647-01-0	--	--	--		Hydrogen chloride	7647-01-0	--	--	--	
Methanol	67-56-1	--	--	--		Methanol	67-56-1	--	--	--		Methanol	67-56-1	--	--	--	
Methyl bromide (Bromine)	74-83-9	--	--	--		Methyl bromide (Bromine)	74-83-9	--	--	--		Methyl bromide (Bromine)	74-83-9	--	--	--	
Methyl chloride (Chlorine)	74-87-3	--	--	--		Methyl chloride (Chlorine)	74-87-3	--	--	--		Methyl chloride (Chlorine)	74-87-3	--	--	--	
Naphthalene	91-20-3	--	--	--		Naphthalene	91-20-3	--	--	--		Naphthalene	91-20-3	--	--	--	
Phenol	108-95-2	--	--	--		Phenol	108-95-2	--	--	--		Phenol	108-95-2	--	--	--	
POM	--	--	--	--		POM	--	--	--	--		POM	--	--	--	--	
Propylene oxide	75-56-9	--	--	--		Propylene oxide	75-56-9	--	--	--		Propylene oxide	75-56-9	--	--	--	
Styrene	100-42-5	--	--	--		Styrene	100-42-5	--	--	--		Styrene	100-42-5	--	--	--	
Toluene	108-88-3	--	--	--		Toluene	108-88-3	--	--	--		Toluene	108-88-3	--	--	--	
Vinyl chloride	75-01-4	--	--	--		Vinyl chloride	75-01-4	--	--	--		Vinyl chloride	75-01-4	--	--	--	
o-Xylene	95-47-6	--	--	--		o-Xylene	95-47-6	--	--	--		o-Xylene	95-47-6	--	--	--	
m,p-Xylene	--	--	--	--		m,p-Xylene	--	--	--	--		m,p-Xylene	--	--	--	--	
Antimony	7440-36-0	--	--	--		Antimony	7440-36-0	--	--	--		Antimony	7440-36-0	--	--	--	
Arsenic	7440-38-2	--	--	--		Arsenic	7440-38-2	--	--	--		Arsenic	7440-38-2	--	--	--	
Beryllium	7440-41-7	--	--	--		Beryllium	7440-41-7	--	--	--		Beryllium	7440-41-7	--	--	--	
Cadmium	7440-43-9	--	--	--		Cadmium	7440-43-9	--	--	--		Cadmium	7440-43-9	--	--	--	
Chromium	7440-47-3	--	--	--		Chromium	7440-47-3	--	--	--		Chromium	7440-47-3	--	--	--	
Cobalt	7440-48-4	--	--	--		Cobalt	7440-48-4	--	--	--		Cobalt	7440-48-4	--	--	--	
Manganese	7439-96-5	--	--	--		Manganese	7439-96-5	--	--	--		Manganese	7439-96-5	--	--	--	
Mercury	7439-97-6	--	--	--		Mercury	7439-97-6	--	--	--		Mercury	7439-97-6	--	--	--	
Nickel	7440-02-0	--	--	--		Nickel	7440-02-0	--	--	--		Nickel	7440-02-0	--	--	--	
Selenium	7782-49-2	--	--	--		Selenium	7782-49-2	--	--	--		Selenium	7782-49-2	--	--	--	
Total HAPs																	

GI-07 Spreadsheet

Facility Emissions Summary
Air Quality Permit Program
Doc Type: Permit Application

1a) AQ Facility ID number: 13900044

2) Facility name: Superior Minerals

1b) Agency Interest ID number: 65

Follow the instructions to complete this spreadsheet. This spreadsheet can be copied into a tab for your emissions spreadsheet and must be submitted on a CD with your application. If you need to provide emissions information for more emissions units, add more sets of columns (3a through 3f) to the right as needed in the Emissions by Source table. If you need to provide information for more pollutants, add rows as needed.

Emissions by Source Table

3a) Tempo SI ID number:		EQUI13; STRU17					3a) Tempo SI ID number:					EQUI14; STRU17					3a) Tempo SI ID number:					EQUI15; STRU17				
3b) Delta ID No.:		EU012; SV002					3b) Delta ID No.:		EU013; SV002					3b) Delta ID No.:		EU014; SV002										
3c)	3d)	3e) Potential			3f)	3c)	3d)	3e) Potential			3f)	3c)	3d)	3e) Potential			3f)	3c)	3d)	3e) Potential			3f)			
Pollutant Name	CAS #	Pounds (lbs) per hour	tons per year un-restricted	tons per year limited	Actual tons per year	Pollutant Name	CAS #	Pounds (lbs) per hour	tons per year un-restricted	tons per year limited	Actual tons per year	Pollutant Name	CAS #	Pounds (lbs) per hour	tons per year un-restricted	tons per year limited	Actual tons per year	Pollutant Name	CAS #	Pounds (lbs) per hour	tons per year un-restricted	tons per year limited	Actual tons per year			
PM	--	0.396	1.734	1.734		PM	--	0.396	1.734	1.734		PM	--	0.396	1.734	1.734		PM	--	0.396	1.734	1.734				
PM ₁₀	--	0.064	0.280	0.280		PM ₁₀	--	0.064	0.280	0.280		PM ₁₀	--	0.064	0.280	0.280		PM ₁₀	--	0.064	0.280	0.280				
PM _{2.5}	--	0.024	0.105	0.105		PM _{2.5}	--	0.024	0.105	0.105		PM _{2.5}	--	0.024	0.105	0.105		PM _{2.5}	--	0.024	0.105	0.105				
SO ₂	--	--	--	--		SO ₂	--	--	--	--		SO ₂	--	--	--	--		SO ₂	--	--	--	--				
NO _x	--	--	--	--		NO _x	--	--	--	--		NO _x	--	--	--	--		NO _x	--	--	--	--				
VOC	--	--	--	--		VOC	--	--	--	--		VOC	--	--	--	--		VOC	--	--	--	--				
CO	--	--	--	--		CO	--	--	--	--		CO	--	--	--	--		CO	--	--	--	--				
Lead	7439-92-1	--	--	--		Lead	7439-92-1	--	--	--		Lead	7439-92-1	--	--	--		Lead	7439-92-1	--	--	--				
GHGs:						GHGs:						GHGs:						GHGs:								
N ₂ O (mass)	--	--	--	--		N ₂ O (mass)	--	--	--	--		N ₂ O (mass)	--	--	--	--		N ₂ O (mass)	--	--	--	--				
CH ₄ (mass)	--	--	--	--		CH ₄ (mass)	--	--	--	--		CH ₄ (mass)	--	--	--	--		CH ₄ (mass)	--	--	--	--				
CO ₂ (mass)	--	--	--	--		CO ₂ (mass)	--	--	--	--		CO ₂ (mass)	--	--	--	--		CO ₂ (mass)	--	--	--	--				
CO ₂ e	--	--	--	--		CO ₂ e	--	--	--	--		CO ₂ e	--	--	--	--		CO ₂ e	--	--	--	--				
HAPs:						HAPs:						HAPs:						HAPs:								
Acrolein	107-02-8	--	--	--		Acrolein	107-02-8	--	--	--		Acrolein	107-02-8	--	--	--		Acrolein	107-02-8	--	--	--				
Benzene	71-43-2	--	--	--		Benzene	71-43-2	--	--	--		Benzene	71-43-2	--	--	--		Benzene	71-43-2	--	--	--				
Bis (2-ethylhexyl) phth	117-81-7	--	--	--		Bis (2-ethylhexyl) phth	117-81-7	--	--	--		Bis (2-ethylhexyl) phth	117-81-7	--	--	--		Bis (2-ethylhexyl) phth	117-81-7	--	--	--				
1,3-Butadiene	106-99-0	--	--	--		1,3-Butadiene	106-99-0	--	--	--		1,3-Butadiene	106-99-0	--	--	--		1,3-Butadiene	106-99-0	--	--	--				
Chlorine	7782-50-5	--	--	--		Chlorine	7782-50-5	--	--	--		Chlorine	7782-50-5	--	--	--		Chlorine	7782-50-5	--	--	--				
Chlorobenzene	108-90-7	--	--	--		Chlorobenzene	108-90-7	--	--	--		Chlorobenzene	108-90-7	--	--	--		Chlorobenzene	108-90-7	--	--	--				
Chloroform	67-66-3	--	--	--		Chloroform	67-66-3	--	--	--		Chloroform	67-66-3	--	--	--		Chloroform	67-66-3	--	--	--				
1,4-Dichlorobenzene	106-46-7	--	--	--		1,4-Dichlorobenzene	106-46-7	--	--	--		1,4-Dichlorobenzene	106-46-7	--	--	--		1,4-Dichlorobenzene	106-46-7	--	--	--				
Ethylbenzene	100-41-4	--	--	--		Ethylbenzene	100-41-4	--	--	--		Ethylbenzene	100-41-4	--	--	--		Ethylbenzene	100-41-4	--	--	--				
Ethylene dichloride (1,2)	107-06-2	--	--	--		Ethylene dichloride (1,2)	107-06-2	--	--	--		Ethylene dichloride (1,2)	107-06-2	--	--	--		Ethylene dichloride (1,2)	107-06-2	--	--	--				
Formaldehyde	50-00-0	--	--	--		Formaldehyde	50-00-0	--	--	--		Formaldehyde	50-00-0	--	--	--		Formaldehyde	50-00-0	--	--	--				
Hexachlorobenzene	118-74-1	--	--	--		Hexachlorobenzene	118-74-1	--	--	--		Hexachlorobenzene	118-74-1	--	--	--		Hexachlorobenzene	118-74-1	--	--	--				
Hexane	110-54-3	--	--	--		Hexane	110-54-3	--	--	--		Hexane	110-54-3	--	--	--		Hexane	110-54-3	--	--	--				
Hydrogen chloride	7647-01-0	--	--	--		Hydrogen chloride	7647-01-0	--	--	--		Hydrogen chloride	7647-01-0	--	--	--		Hydrogen chloride	7647-01-0	--	--	--				
Methanol	67-56-1	--	--	--		Methanol	67-56-1	--	--	--		Methanol	67-56-1	--	--	--		Methanol	67-56-1	--	--	--				
Methyl bromide (Brom)	74-83-9	--	--	--		Methyl bromide (Brom)	74-83-9	--	--	--		Methyl bromide (Brom)	74-83-9	--	--	--		Methyl bromide (Brom)	74-83-9	--	--	--				
Methyl chloride (Chlor)	74-87-3	--	--	--		Methyl chloride (Chlor)	74-87-3	--	--	--		Methyl chloride (Chlor)	74-87-3	--	--	--		Methyl chloride (Chlor)	74-87-3	--	--	--				
Naphthalene	91-20-3	--	--	--		Naphthalene	91-20-3	--	--	--		Naphthalene	91-20-3	--	--	--		Naphthalene	91-20-3	--	--	--				
Phenol	108-95-2	--	--	--		Phenol	108-95-2	--	--	--		Phenol	108-95-2	--	--	--		Phenol	108-95-2	--	--	--				
POM	--	--	--	--		POM	--	--	--	--		POM	--	--	--	--		POM	--	--	--	--				
Propylene oxide	75-56-9	--	--	--		Propylene oxide	75-56-9	--	--	--		Propylene oxide	75-56-9	--	--	--		Propylene oxide	75-56-9	--	--	--				
Styrene	100-42-5	--	--	--		Styrene	100-42-5	--	--	--		Styrene	100-42-5	--	--	--		Styrene	100-42-5	--	--	--				
Toluene	108-88-3	--	--	--		Toluene	108-88-3	--	--	--		Toluene	108-88-3	--	--	--		Toluene	108-88-3	--	--	--				
Vinyl chloride	75-01-4	--	--	--		Vinyl chloride	75-01-4	--	--	--		Vinyl chloride	75-01-4	--	--	--		Vinyl chloride	75-01-4	--	--	--				
o-Xylene	95-47-6	--	--	--		o-Xylene	95-47-6	--	--	--		o-Xylene	95-47-6	--	--	--		o-Xylene	95-47-6	--	--	--				
m,p-Xylene	--	--	--	--		m,p-Xylene	--	--	--	--		m,p-Xylene	--	--	--	--		m,p-Xylene	--	--	--	--				
Antimony	7440-36-0	--	--	--		Antimony	7440-36-0	--	--	--		Antimony	7440-36-0	--	--	--		Antimony	7440-36-0	--	--	--				
Arsenic	7440-38-2	--	--	--		Arsenic	7440-38-2	--	--	--		Arsenic	7440-38-2	--	--	--		Arsenic	7440-38-2	--	--	--				
Beryllium	7440-41-7	--	--	--		Beryllium	7440-41-7	--	--	--		Beryllium	7440-41-7	--	--	--		Beryllium	7440-41-7	--	--	--				
Cadmium	7440-43-9	--	--	--		Cadmium	7440-43-9	--	--	--		Cadmium	7440-43-9	--	--	--		Cadmium	7440-43-9	--	--	--				
Chromium	7440-47-3	--	--	--		Chromium	7440-47-3	--	--	--		Chromium	7440-47-3	--	--	--		Chromium	7440-47-3	--	--	--				
Cobalt	7440-48-4	--	--	--		Cobalt	7440-48-4	--	--	--		Cobalt	7440-48-4	--	--	--		Cobalt	7440-48-4	--	--	--				
Manganese	7439-96-5	--	--	--		Manganese	7439-96-5	--	--	--		Manganese	7439-96-5	--	--	--		Manganese	7439-96-5	--	--	--				
Mercury	7439-97-6	--	--	--		Mercury	7439-97-6	--	--	--		Mercury	7439-97-6	--	--	--		Mercury	7439-97-6	--	--	--				
Nickel	7440-02-0	--	--	--		Nickel	7440-02-0	--	--	--		Nickel	7440-02-0	--	--	--		Nickel	7440-02-0	--	--	--				
Selenium	7782-49-2	--	--	--		Selenium	7782-49-2	--	--	--		Selenium	7782-49-2	--	--	--		Selenium	7782-49-2	--	--	--				
Total HAPs																										



Facility Emissions Summary
Air Quality Permit Program
Doc Type: Permit Application

1b) Agency Interest ID number: 65

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 84

Emissions by Source Table

| 3a) Tempo SI ID number: | | EQUI18; STRU12, STRU23, STRU27 | | | | 3a) Tempo SI ID number: | | EQUI24; STRU17 | | | | 3a) Tempo SI ID number: | | EQUI25; STRU17 | | | |
|---|-----------|--------------------------------|-----------------------------|-----------------------|----------------------|---|-----------|-----------------------|-----------------------------|-----------------------|----------------------|---|-----------|-----------------------|-----------------------------|-----------------------|----------------------|
| 3b) Delta ID No.: | | EU019; SV008, SV012, SV025 | | | | 3b) Delta ID No.: | | EU025; SV002 | | | | 3b) Delta ID No.: | | EU026; SV002 | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year |
| PM | -- | 0.005 | 0.022 | 0.022 | | PM | -- | 0.002 | 0.010 | 0.010 | | PM | -- | 0.743 | 3.252 | 3.252 | |
| PM ₁₀ | -- | 0.001 | 0.004 | 0.004 | | PM ₁₀ | -- | 0.001 | 0.004 | 0.004 | | PM ₁₀ | -- | 0.120 | 0.526 | 0.526 | |
| PM _{2.5} | -- | 0.000 | 0.001 | 0.001 | | PM _{2.5} | -- | 0.001 | 0.004 | 0.004 | | PM _{2.5} | -- | 0.045 | 0.197 | 0.197 | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | |
| VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | |
| CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (1,1,2,2-tetrachloroethane) | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1,1,2,2-tetrachloroethane) | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1,1,2,2-tetrachloroethane) | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Bromomethane) | 74-83-9 | -- | -- | -- | | Methyl bromide (Bromomethane) | 74-83-9 | -- | -- | -- | | Methyl bromide (Bromomethane) | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chloromethane) | 74-87-3 | -- | -- | -- | | Methyl chloride (Chloromethane) | 74-87-3 | -- | -- | -- | | Methyl chloride (Chloromethane) | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | |
| Total HAPs | | | | | | | | | | | | | | | | | |

1a) AQ Facility ID number: 13900044

2) Facility name: Superior Minerals

1b) Agency Interest ID number: 65

Follow the instructions to complete this spreadsheet. This spreadsheet can be copied into a tab for your emissions spreadsheet and must be submitted on a CD with your application. If you need to provide emissions information for more emissions units, add more sets of columns (3a through 3f) to the right as needed in the Emissions by Source table. If you need to provide information for more pollutants, add rows as needed.

Emissions by Source Table

| 3a) Tempo SI ID number: | | EQUI26; STRU17 | | | | 3a) Tempo SI ID number: | | EQUI29; STRU1 | | | | 3a) Tempo SI ID number: | | EQUI30; STRU14 | | | |
|-------------------------|-----------|--|-----------------------------|-----------------------|----------------------|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|
| 3b) Delta ID No.: | | EU027; SV002 | | | | 3b) Delta ID No.: | | EU047; SV014 | | | | 3b) Delta ID No.: | | EU048; SV027 | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year |
| PM | -- | Note: In parallel with Bin 1, 3, 13, 14, 23, 4 | | | | PM | -- | 2.132 | 9.337 | 9.337 | | PM | -- | 0.005 | 0.022 | 0.022 | |
| PM ₁₀ | -- | | | | | PM ₁₀ | -- | 1.807 | 7.914 | 7.914 | | PM ₁₀ | -- | 0.001 | 0.004 | 0.004 | |
| PM _{2.5} | -- | | | | | PM _{2.5} | -- | 0.717 | 3.139 | 3.139 | | PM _{2.5} | -- | 0.000 | 0.001 | 0.001 | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | 8.82E-03 | 3.86E-02 | 3.86E-02 | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | 1.471 | 6.441 | 6.441 | | NO _x | -- | -- | -- | -- | |
| VOC | -- | -- | -- | -- | | VOC | -- | 0.081 | 0.354 | 0.354 | | VOC | -- | -- | -- | -- | |
| CO | -- | -- | -- | -- | | CO | -- | 1.235 | 5.411 | 5.411 | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | 7.35E-06 | 3.22E-05 | 3.22E-05 | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | | | | | | | | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | 3.31E-03 | 1.45E-02 | 1.45E-02 | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | 3.31E-02 | 1.45E-01 | 1.45E-01 | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | 1,754.64 | 7,685.33 | 7,685.33 | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | 1,756.44 | 7,693.22 | 7,693.22 | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | | | | | | | | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | 3.09E-05 | 1.35E-04 | 1.35E-04 | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | 1.76E-05 | 7.73E-05 | 7.73E-05 | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | 1.10E-03 | 4.83E-03 | 4.83E-03 | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | 2.65E-02 | 1.16E-01 | 1.16E-01 | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | 8.97E-06 | 3.93E-05 | 3.93E-05 | | Naphthalene | 91-20-3 | -- | -- | -- | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | -- | -- | -- | | POM | -- | 1.03E-05 | 4.50E-05 | 4.50E-05 | | POM | -- | -- | -- | -- | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | 5.00E-05 | 2.19E-04 | 2.19E-04 | | Toluene | 108-88-3 | -- | -- | -- | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | 2.94E-06 | 1.29E-05 | 1.29E-05 | | Arsenic | 7440-38-2 | -- | -- | -- | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | 1.76E-07 | 7.73E-07 | 7.73E-07 | | Beryllium | 7440-41-7 | -- | -- | -- | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | 1.62E-05 | 7.09E-05 | 7.09E-05 | | Cadmium | 7440-43-9 | -- | -- | -- | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | 2.06E-05 | 9.02E-05 | 9.02E-05 | | Chromium | 7440-47-3 | -- | -- | -- | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | 1.24E-06 | 5.41E-06 | 5.41E-06 | | Cobalt | 7440-48-4 | -- | -- | -- | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | 5.59E-06 | 2.45E-05 | 2.45E-05 | | Manganese | 7439-96-5 | -- | -- | -- | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | 3.82E-06 | 1.67E-05 | 1.67E-05 | | Mercury | 7439-97-6 | -- | -- | -- | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | 3.09E-05 | 1.35E-04 | 1.35E-04 | | Nickel | 7440-02-0 | -- | -- | -- | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | 3.53E-07 | 1.55E-06 | 1.55E-06 | | Selenium | 7782-49-2 | -- | -- | -- | |
| Total HAPs | | | | | | | | 2.78E-02 | 1.22E-01 | 1.22E-01 | | | | | | | |

1a) AQ Facility ID number: 13900044

2) Facility name: Superior Minerals

1b) Agency Interest ID number: 65

Follow the instructions to complete this spreadsheet. This spreadsheet can be copied into a tab for your emissions spreadsheet and must be submitted on a CD with your application. If you need to provide emissions information for more emissions units, add more sets of columns (3a through 3f) to the right as needed in the Emissions by Source table. If you need to provide information for more pollutants, add rows as needed.

Emissions by Source Table

| | | | | | | | | | | | | | | | | | |
|--|-----------|-----------------------|-----------------------------|-----------------------|-----|---------------------------------------|-----------|-----------------------|-----------------------------|-----------------------|-----|---------------------------------------|-----------|-----------------------|-----------------------------|-----------------------|-----|
| 3a) Tempo SI ID number: EQUI31; STRU12, STRU23, STRU27 | | | | | | 3a) Tempo SI ID number: EQUI33; STRU3 | | | | | | 3a) Tempo SI ID number: EQUI36; STRU4 | | | | | |
| 3b) Delta ID No.: EU039; SV008, SV012, SV025 | | | | | | 3b) Delta ID No.: EU054; SV016 | | | | | | 3b) Delta ID No.: EU060; SV017 | | | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | |
| Pollutant Name | CAS # | | | | | Pollutant Name | CAS # | | | | | Pollutant Name | CAS # | | | | |
| PM | -- | 0.005 | 0.022 | 0.022 | | PM | -- | 1.077 | 4.717 | 4.717 | | PM | -- | 0.577 | 2.529 | 2.529 | |
| PM ₁₀ | -- | 0.001 | 0.004 | 0.004 | | PM ₁₀ | -- | 0.915 | 4.006 | 4.006 | | PM ₁₀ | -- | 0.275 | 1.204 | 1.204 | |
| PM _{2.5} | -- | 0.000 | 0.001 | 0.001 | | PM _{2.5} | -- | 0.370 | 1.619 | 1.619 | | PM _{2.5} | -- | 0.117 | 0.514 | 0.514 | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | 5.29E-03 | 2.32E-02 | 2.32E-02 | | SO ₂ | -- | 1.18E-03 | 5.15E-03 | 5.15E-03 | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | 0.882 | 3.865 | 3.865 | | NO _x | -- | 0.196 | 0.859 | 0.859 | |
| VOC | -- | -- | -- | -- | | VOC | -- | 0.049 | 0.213 | 0.213 | | VOC | -- | 0.011 | 0.047 | 0.047 | |
| CO | -- | -- | -- | -- | | CO | -- | 0.741 | 3.246 | 3.246 | | CO | -- | 0.165 | 0.721 | 0.721 | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | 4.41E-06 | 1.93E-05 | 1.93E-05 | | Lead | 7439-92-1 | 9.80E-07 | 4.29E-06 | 4.29E-06 | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | 1.98E-03 | 8.69E-03 | 8.69E-03 | | N ₂ O (mass) | -- | 4.41E-04 | 1.93E-03 | 1.93E-03 | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | 1.98E-02 | 8.69E-02 | 8.69E-02 | | CH ₄ (mass) | -- | 4.41E-03 | 1.93E-02 | 1.93E-02 | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | 1,052.78 | 4,611.20 | 4,611.20 | | CO ₂ (mass) | -- | 233.95 | 1,024.71 | 1,024.71 | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | 1,053.87 | 4,615.93 | 4,615.93 | | CO ₂ e | -- | 234.19 | 1,025.76 | 1,025.76 | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | 1.85E-05 | 8.12E-05 | 8.12E-05 | | Benzene | 71-43-2 | 4.12E-06 | 1.80E-05 | 1.80E-05 | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | 1.06E-05 | 4.64E-05 | 4.64E-05 | | 1,4-Dichlorobenzene | 106-46-7 | 2.35E-06 | 1.03E-05 | 1.03E-05 | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | 6.62E-04 | 2.90E-03 | 2.90E-03 | | Formaldehyde | 50-00-0 | 1.47E-04 | 6.44E-04 | 6.44E-04 | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | 1.59E-02 | 6.96E-02 | 6.96E-02 | | Hexane | 110-54-3 | 3.53E-03 | 1.55E-02 | 1.55E-02 | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | 5.38E-06 | 2.36E-05 | 2.36E-05 | | Naphthalene | 91-20-3 | 1.20E-06 | 5.24E-06 | 5.24E-06 | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | -- | -- | -- | | POM | -- | 6.16E-06 | 2.70E-05 | 2.70E-05 | | POM | -- | 1.37E-06 | 6.00E-06 | 6.00E-06 | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | 3.00E-05 | 1.31E-04 | 1.31E-04 | | Toluene | 108-88-3 | 6.67E-06 | 2.92E-05 | 2.92E-05 | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | 1.76E-06 | 7.73E-06 | 7.73E-06 | | Arsenic | 7440-38-2 | 3.92E-07 | 1.72E-06 | 1.72E-06 | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | 1.06E-07 | 4.64E-07 | 4.64E-07 | | Beryllium | 7440-41-7 | 2.35E-08 | 1.03E-07 | 1.03E-07 | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | 9.71E-06 | 4.25E-05 | 4.25E-05 | | Cadmium | 7440-43-9 | 2.16E-06 | 9.45E-06 | 9.45E-06 | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | 1.24E-05 | 5.41E-05 | 5.41E-05 | | Chromium | 7440-47-3 | 2.75E-06 | 1.20E-05 | 1.20E-05 | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | 7.41E-07 | 3.25E-06 | 3.25E-06 | | Cobalt | 7440-48-4 | 1.65E-07 | 7.21E-07 | 7.21E-07 | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | 3.35E-06 | 1.47E-05 | 1.47E-05 | | Manganese | 7439-96-5 | 7.45E-07 | 3.26E-06 | 3.26E-06 | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | 2.29E-06 | 1.00E-05 | 1.00E-05 | | Mercury | 7439-97-6 | 5.10E-07 | 2.23E-06 | 2.23E-06 | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | 1.85E-05 | 8.12E-05 | 8.12E-05 | | Nickel | 7440-02-0 | 4.12E-06 | 1.80E-05 | 1.80E-05 | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | 2.12E-07 | 9.28E-07 | 9.28E-07 | | Selenium | 7782-49-2 | 4.71E-08 | 2.06E-07 | 2.06E-07 | |
| Total HAPs | | | | | | | | 1.67E-02 | 7.30E-02 | 7.30E-02 | | | | 3.70E-03 | 1.62E-02 | 1.62E-02 | |



Facility Emissions Summary
Air Quality Permit Program
Doc Type: Permit Application

1b) Agency Interest ID number: 65

Superior Minerals

Emissions by Source Table

| 3a) Tempo SI ID number: | | EQUI41; STRU10 | | | | 3a) Tempo SI ID number: | | EQUI42; STRU10 | | | | 3a) Tempo SI ID number: | | EQUI48; STRU14 | | | |
|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|
| 3b) Delta ID No.: | | EU068; SV023 | | | | 3b) Delta ID No.: | | EU069; SV023 | | | | 3b) Delta ID No.: | | EU079; SV027 | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year |
| PM | -- | 0.448 | 1.963 | 1.963 | | PM | -- | 0.000 | 0.002 | 0.002 | | PM | -- | 0.119 | 0.520 | 0.520 | |
| PM ₁₀ | -- | 0.302 | 1.322 | 1.322 | | PM ₁₀ | -- | 0.000 | 0.001 | 0.001 | | PM ₁₀ | -- | 0.019 | 0.084 | 0.084 | |
| PM _{2.5} | -- | 0.226 | 0.991 | 0.991 | | PM _{2.5} | -- | 0.000 | 0.001 | 0.001 | | PM _{2.5} | -- | 0.007 | 0.032 | 0.032 | |
| SO ₂ | -- | 1.00E-02 | 4.38E-02 | 4.38E-02 | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | 1.667 | 7.300 | 7.300 | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | |
| VOC | -- | 0.092 | 0.402 | 0.402 | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | |
| CO | -- | 1.400 | 6.132 | 6.132 | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | 8.33E-06 | 3.65E-05 | 3.65E-05 | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | 3.75E-03 | 1.64E-02 | 1.64E-02 | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | 3.75E-02 | 1.64E-01 | 1.64E-01 | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | 1.988.59 | 8.710.04 | 8.710.04 | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | 1.990.64 | 8.718.99 | 8.718.99 | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | 3.50E-05 | 1.53E-04 | 1.53E-04 | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | 2.00E-05 | 8.76E-05 | 8.76E-05 | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (L | 107-06-2 | -- | -- | -- | | Ethylene dichloride (L | 107-06-2 | -- | -- | -- | | Ethylene dichloride (L | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | 1.25E-03 | 5.48E-03 | 5.48E-03 | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | 3.00E-02 | 1.31E-01 | 1.31E-01 | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | 1.02E-05 | 4.45E-05 | 4.45E-05 | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | 1.16E-05 | 5.10E-05 | 5.10E-05 | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | 5.67E-05 | 2.48E-04 | 2.48E-04 | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | 3.33E-06 | 1.46E-05 | 1.46E-05 | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | |
| Beryllium | 7440-41-7 | 2.00E-07 | 8.76E-07 | 8.76E-07 | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | |
| Cadmium | 7440-43-9 | 1.83E-05 | 8.03E-05 | 8.03E-05 | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | |
| Chromium | 7440-47-3 | 2.33E-05 | 1.02E-04 | 1.02E-04 | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | |
| Cobalt | 7440-48-4 | 1.40E-06 | 6.13E-06 | 6.13E-06 | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | |
| Manganese | 7439-96-5 | 6.33E-06 | 2.77E-05 | 2.77E-05 | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | |
| Mercury | 7439-97-6 | 4.33E-06 | 1.90E-05 | 1.90E-05 | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | |
| Nickel | 7440-02-0 | 3.50E-05 | 1.53E-04 | 1.53E-04 | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | |
| Selenium | 7782-49-2 | 4.00E-07 | 1.75E-06 | 1.75E-06 | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | |
| Total HAPs | | 3.15E-02 | 1.38E-01 | 1.38E-01 | | | | | | | | | | | | | |



Facility Emissions Summary
Air Quality Permit Program
Doc Type: Permit Application

1b) Agency Interest ID number: 65

Superior Minerals

Follow the instructions to complete this spreadsheet. This spreadsheet can be copied into a tab for your emissions spreadsheet and must be submitted on a CD with your application. If you need to provide emissions information for more emissions units, add more sets of columns (3a through 3f) to the right as needed in the Emissions by Source table. If you need to provide information for more pollutants, add rows as needed.

| 3a) Tempo SI ID number: | | EQUI50; STRU14 | | | | 3a) Tempo SI ID number: | | EQUI53 | | | | 3a) Tempo SI ID number: | | EQUI54 | | | |
|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|
| 3b) Delta ID No.: | | EU081; SV027 | | | | 3b) Delta ID No.: | | EU040 | | | | 3b) Delta ID No.: | | EU041 | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year |
| PM | -- | 0.248 | 1.084 | 1.084 | | PM | -- | 0.044 | 0.192 | 0.192 | | PM | -- | 0.015 | 0.067 | 0.067 | |
| PM ₁₀ | -- | 0.040 | 0.175 | 0.175 | | PM ₁₀ | -- | 0.014 | 0.063 | 0.063 | | PM ₁₀ | -- | 0.005 | 0.022 | 0.022 | |
| PM _{2.5} | -- | 0.015 | 0.066 | 0.066 | | PM _{2.5} | -- | 0.004 | 0.018 | 0.018 | | PM _{2.5} | -- | 0.001 | 0.006 | 0.006 | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | |
| VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | |
| CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | | | | | | | | | |



Facility Emissions Summary
Air Quality Permit Program
Doc Type: Permit Application

1b) Agency Interest ID number: 65

Superior Minerals

Emissions by Source Table

| 3a) Tempo SI ID number: | | EQUI55; STRU1 | | | | 3a) Tempo SI ID number: | | EQUI57; STRU1, STRU3 | | | | 3a) Tempo SI ID number: | | EQUI59; STRU1 | | | |
|---|-----------|-----------------------|-----------------------------|-----------------------|----------------------|---|-----------|-----------------------|-----------------------------|-----------------------|----------------------|---|-----------|-----------------------|-----------------------------|-----------------------|----------------------|
| 3b) Delta ID No.: | | SV014 | | | | 3b) Delta ID No.: | | EU044; SV014, SV016 | | | | 3b) Delta ID No.: | | EU052; SV014 | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year |
| PM | -- | 4.079 | 17.868 | 17.868 | | PM | -- | 0.003 | 0.013 | 0.013 | | PM | -- | 0.003 | 0.013 | 0.013 | |
| PM ₁₀ | -- | 2.737 | 11.990 | 11.990 | | PM ₁₀ | -- | 0.001 | 0.005 | 0.005 | | PM ₁₀ | -- | 0.001 | 0.005 | 0.005 | |
| PM _{2.5} | -- | 2.044 | 8.955 | 8.955 | | PM _{2.5} | -- | 0.001 | 0.005 | 0.005 | | PM _{2.5} | -- | 0.001 | 0.005 | 0.005 | |
| SO ₂ | -- | 0.073 | 0.320 | 0.320 | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | 6.857 | 30.03 | 30.034 | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | |
| VOC | -- | 0.086 | 0.378 | 0.378 | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | |
| CO | -- | 1.71 | 7.51 | 7.509 | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | 4.32E-04 | 1.89E-03 | 1.89E-03 | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | 6.35E-02 | 2.78E-01 | 2.78E-01 | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | 0.317 | 1.390 | 1.390 | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | 7,826.51 | 34,280.10 | 34,280.10 | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | 7,853.36 | 34,397.73 | 34,397.73 | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | 7.34E-05 | 3.21E-04 | 3.21E-04 | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | 2.18E-05 | 9.55E-05 | 9.55E-05 | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (1,1,2,2-tetrachloroethane) | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1,1,2,2-tetrachloroethane) | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1,1,2,2-tetrachloroethane) | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | 1.13E-02 | 4.96E-02 | 4.96E-02 | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Bromomethane) | 74-83-9 | -- | -- | -- | | Methyl bromide (Bromomethane) | 74-83-9 | -- | -- | -- | | Methyl bromide (Bromomethane) | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chloromethane) | 74-87-3 | -- | -- | -- | | Methyl chloride (Chloromethane) | 74-87-3 | -- | -- | -- | | Methyl chloride (Chloromethane) | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | 3.87E-04 | 1.70E-03 | 1.70E-03 | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | 4.08E-04 | 1.79E-03 | 1.79E-03 | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | 2.13E-03 | 9.31E-03 | 9.31E-03 | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | 3.74E-05 | 1.64E-04 | 1.64E-04 | | p-Xylene | 95-47-6 | -- | -- | -- | | p-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | 1.92E-04 | 8.41E-04 | 8.41E-04 | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | |
| Beryllium | 7440-41-7 | 1.44E-04 | 6.31E-04 | 6.31E-04 | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | |
| Cadmium | 7440-43-9 | 1.44E-04 | 6.31E-04 | 6.31E-04 | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | |
| Chromium | 7440-47-3 | 1.44E-04 | 6.31E-04 | 6.31E-04 | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | |
| Manganese | 7439-96-5 | 2.88E-04 | 1.26E-03 | 1.26E-03 | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | |
| Mercury | 7439-97-6 | 1.44E-04 | 6.31E-04 | 6.31E-04 | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | |
| Nickel | 7440-02-0 | 1.44E-04 | 6.31E-04 | 6.31E-04 | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | |
| Selenium | 7782-49-2 | 7.20E-04 | 3.15E-03 | 3.15E-03 | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | |
| Total HAPs | | 1.59E-02 | 6.98E-02 | 6.96E-02 | | | | | | | | | | | | | |



Facility Emissions Summary
Air Quality Permit Program
Doc Type: Permit Application

1b) Agency Interest ID number: 65

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 84

Emissions by Source Table

| 3a) Tempo SI ID number: | | EQUI60; STRU17 | | | | 3a) Tempo SI ID number: | | EQUI61; STRU17 | | | | 3a) Tempo SI ID number: | | EQUI63; STRU1 | | | | |
|---|-----------|-----------------------|-----------------------------|-----------------------|----------------------|---|-----------|-----------------------|-----------------------------|-----------------------|----------------------|---|-------------------|-----------------------|-----------------------------|-----------------------|----------------------|--|
| 3b) Delta ID No.: | | EU053; SV002 | | | | 3b) Delta ID No.: | | EU055; SV002 | | | | 3b) Delta ID No.: | | EU057; SV014 | | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | |
| Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | |
| PM | -- | 0.001 | 0.004 | 0.004 | | PM | -- | Included with EQUI14 | | | | | PM | -- | 0.000 | 0.002 | 0.002 | |
| PM ₁₀ | -- | 0.000 | 0.001 | 0.001 | | PM ₁₀ | -- | | | | | | PM ₁₀ | -- | 0.000 | 0.001 | 0.001 | |
| PM _{2.5} | -- | 0.000 | 0.001 | 0.001 | | PM _{2.5} | -- | | | | | | PM _{2.5} | -- | 0.000 | 0.001 | 0.001 | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | |
| VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | |
| CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | |
| GHGs: | | | | | | | | | | | | | | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | |
| HAPs: | | | | | | | | | | | | | | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | |
| Ethylene dichloride (1,1,2,2-tetrachloroethane) | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1,1,2,2-tetrachloroethane) | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1,1,2,2-tetrachloroethane) | 107-06-2 | -- | -- | -- | | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | |
| Methyl bromide (Bromomethane) | 74-83-9 | -- | -- | -- | | Methyl bromide (Bromomethane) | 74-83-9 | -- | -- | -- | | Methyl bromide (Bromomethane) | 74-83-9 | -- | -- | -- | | |
| Methyl chloride (Chloromethane) | 74-87-3 | -- | -- | -- | | Methyl chloride (Chloromethane) | 74-87-3 | -- | -- | -- | | Methyl chloride (Chloromethane) | 74-87-3 | -- | -- | -- | | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | |
| POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | |
| o-Xylene | 95-47-6 | -- | -- | -- | | p-Xylene | 95-47-6 | -- | -- | -- | | p-Xylene | 95-47-6 | -- | -- | -- | | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | |
| Total HAPs | | | | | | | | | | | | | | | | | | |



Facility Emissions Summary
Air Quality Permit Program
Doc Type: Permit Application

1b) Agency Interest ID number: 65

Emissions by Source Table

| 3a) Tempo SI ID number: | | EQUI64; STRU6 | | | | 3a) Tempo SI ID number: | | EQUI71; STRU14 | | | | 3a) Tempo SI ID number: | | EQUI72; STRU14 | | | | | | | |
|--------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|--------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|--------------------------|-----------|--|-----------------------------|-----------------------|----------------------|----|----|----|--|
| 3b) Delta ID No.: | | EU063; SV019 | | | | 3b) Delta ID No.: | | EU084; SV027 | | | | 3b) Delta ID No.: | | EU085; SV027 | | | | | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | | | | |
| Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | | | | |
| PM | -- | 0.030 | 0.130 | 0.130 | | PM | -- | 0.248 | 1.084 | 1.084 | | PM | -- | Note: In parallel with Bin 1, 3, 13, 14, 23, 4 | | | | | | | |
| PM ₁₀ | -- | 0.005 | 0.021 | 0.021 | | PM ₁₀ | -- | 0.040 | 0.175 | 0.175 | | PM ₁₀ | -- | | | | | | | | |
| PM _{2.5} | -- | 0.002 | 0.008 | 0.008 | | PM _{2.5} | -- | 0.015 | 0.066 | 0.066 | | PM _{2.5} | -- | | | | | | | | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | | | | | -- | -- | -- | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | | | | |
| VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | | | | |
| CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | | | | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | | | | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | | | | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | | | | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | | | | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | | | | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | | | | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | | | | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | | | | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | | | | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | | | | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | | | | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | | | | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | | | | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | | | | |
| Ethylene dichloride (1,1 | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1,1 | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1,1 | 107-06-2 | -- | -- | -- | | | | | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | | | | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | | | | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | | | | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | | | | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | | | | |
| Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | | | | |
| Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | | | | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | | | | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | | | | |
| POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | | | | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | | | | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | | | | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | | | | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | | | | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | | | | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | | | | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | | | | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | | | | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | | | | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | | | | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | | | | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | | | | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | | | | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | | | | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | | | | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | | | | |
| Total HAPs | | | | | | | | | | | | | | | | | | | | | |



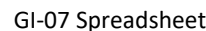
Facility Emissions Summary
Air Quality Permit Program
Doc Type: Permit Application

1b) Agency Interest ID number: 65

Superior Minerals

Follow the instructions to complete this spreadsheet. This spreadsheet can be copied into a tab for your emissions spreadsheet and must be submitted on a CD with your application. If you need to provide emissions information for more emissions units, add more sets of columns (3a through 3f) to the right as needed in the Emissions by Source table. If you need to provide information for more pollutants, add rows as needed.

| 3a) Tempo SI ID number: | | EQUI73; STRU3 | | | | 3a) Tempo SI ID number: | | EQUI74; STRU9 | | | | 3a) Tempo SI ID number: | | EQUI75; STRU12, STRU23, STRU27 | | | |
|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|-------------------------|-----------|--------------------------------|-----------------------------|-----------------------|----------------------|
| 3b) Delta ID No.: | | EU086; SV016 | | | | 3b) Delta ID No.: | | EU087; SV022 | | | | 3b) Delta ID No.: | | EU088; SV008, SV012, SV025 | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year |
| PM | -- | 0.003 | 0.013 | 0.013 | | PM | -- | 0.079 | 0.347 | 0.347 | | PM | -- | 0.495 | 2.168 | 2.168 | |
| PM ₁₀ | -- | 0.001 | 0.005 | 0.005 | | PM ₁₀ | -- | 0.013 | 0.056 | 0.056 | | PM ₁₀ | -- | 0.080 | 0.350 | 0.350 | |
| PM _{2.5} | -- | 0.001 | 0.005 | 0.005 | | PM _{2.5} | -- | 0.005 | 0.021 | 0.021 | | PM _{2.5} | -- | 0.030 | 0.131 | 0.131 | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | |
| VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | |
| CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (L | 107-06-2 | -- | -- | -- | | Ethylene dichloride (L | 107-06-2 | -- | -- | -- | | Ethylene dichloride (L | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom | 74-83-9 | -- | -- | | | | | | | | | | | | | | |



Air Quality Permit Program
Doc Type: Permit Application

1b) Agency Interest ID number: 65

Follow the instructions to complete this spreadsheet. This spreadsheet can be copied into a tab for your emissions spreadsheet and must be submitted on a CD with your application. If you need to provide emissions information for more emissions units, add more sets of columns (3a through 3f) to the right as needed in the Emissions by Source table. If you need to provide information for more pollutants, add rows as needed.

Emissions by Source Table

| 3a) Tempo SI ID number: | | EQUI76; STRU12, STRU23, STRU27 | | | | 3a) Tempo SI ID number: | | EQUI77; STRU13 | | | | 3a) Tempo SI ID number: | | EQUI80; STRU1 | | | |
|-------------------------|-----------|--------------------------------|-----------------------------|-----------------------|----------------------|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|
| 3b) Delta ID No.: | | EU089; SV008, SV012, SV025 | | | | 3b) Delta ID No.: | | EU090; SV026 | | | | 3b) Delta ID No.: | | EU093; SV014 | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year |
| PM | -- | 0.495 | 2.168 | 2.168 | | PM | -- | 0.030 | 0.130 | 0.130 | | PM | -- | 0.003 | 0.014 | 0.014 | |
| PM ₁₀ | -- | 0.080 | 0.350 | 0.350 | | PM ₁₀ | -- | 0.005 | 0.021 | 0.021 | | PM ₁₀ | -- | 0.001 | 0.005 | 0.005 | |
| PM _{2.5} | -- | 0.030 | 0.131 | 0.131 | | PM _{2.5} | -- | 0.002 | 0.008 | 0.008 | | PM _{2.5} | -- | 0.001 | 0.005 | 0.005 | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | |
| VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | |
| CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (L | 107-06-2 | -- | -- | -- | | Ethylene dichloride (L | 107-06-2 | -- | -- | -- | | Ethylene dichloride (L | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | |
| Total HAPs | | | | | | | | | | | | | | | | | |

1a) AQ Facility ID number: 13900044

2) Facility name: Superior Minerals

1b) Agency Interest ID number: 65

Follow the instructions to complete this spreadsheet. This spreadsheet can be copied into a tab for your emissions spreadsheet and must be submitted on a CD with your application. If you need to provide emissions information for more emissions units, add more sets of columns (3a through 3f) to the right as needed in the Emissions by Source table. If you need to provide information for more pollutants, add rows as needed.

Emissions by Source Table

| 3a) Tempo SI ID number: EQUI81; STRU1 | | | | | | 3a) Tempo SI ID number: EQUI82; STRU1, STRU3 | | | | | | 3a) Tempo SI ID number: EQUI86; STRU16 | | | | | |
|---------------------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|--|-----------|-----------------------|-----------------------------|-----------------------|----------------------|--|-----------|-----------------------|-----------------------------|-----------------------|----------------------|
| 3b) Delta ID No.: EU094; SV014 | | | | | | 3b) Delta ID No.: EU095; SV014, SV016 | | | | | | 3b) Delta ID No.: EU099; SV001 | | | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | |
| Pollutant Name | CAS # | | | | Actual tons per year | Pollutant Name | CAS # | | | | Actual tons per year | Pollutant Name | CAS # | | | | Actual tons per year |
| PM | -- | 0.248 | 1.084 | 1.084 | | PM | -- | 0.002 | 0.007 | 0.007 | | PM | -- | 0.002 | 0.007 | 0.007 | |
| PM ₁₀ | -- | 0.114 | 0.501 | 0.501 | | PM ₁₀ | -- | 0.001 | 0.002 | 0.002 | | PM ₁₀ | -- | 0.001 | 0.002 | 0.002 | |
| PM _{2.5} | -- | 0.045 | 0.198 | 0.198 | | PM _{2.5} | -- | 0.001 | 0.002 | 0.002 | | PM _{2.5} | -- | 0.001 | 0.002 | 0.002 | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | |
| VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | |
| CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | |
| Total HAPs | | | | | | Total HAPs | | | | | | Total HAPs | | | | | |

1a) AQ Facility ID number: 13900044
2) Facility name: Superior Minerals

1b) Agency Interest ID number: 65

Follow the instructions to complete this spreadsheet. This spreadsheet can be copied into a tab for your emissions spreadsheet and must be submitted on a CD with your application. If you need to provide emissions information for more emissions units, add more sets of columns (3a through 3f) to the right as needed in the Emissions by Source table. If you need to provide information for more pollutants, add rows as needed.

Emissions by Source Table

| 3a) Tempo SI ID number: EQUI87; STRU1 | | | | | | 3a) Tempo SI ID number: EQUI88; STRU1 | | | | | | 3a) Tempo SI ID number: EQUI89; STRU3 | | | | | |
|---------------------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|---------------------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|---------------------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|
| 3b) Delta ID No.: EU100; SV014 | | | | | | 3b) Delta ID No.: EU101; SV014 | | | | | | 3b) Delta ID No.: EU102; SV016 | | | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | |
| Pollutant Name | CAS # | | | | Actual tons per year | Pollutant Name | CAS # | | | | Actual tons per year | Pollutant Name | CAS # | | | | Actual tons per year |
| PM | -- | 1.125 | 4.928 | 4.928 | | PM | -- | Included with EQUI87 | | | | PM | -- | 0.563 | 2.464 | 2.464 | |
| PM ₁₀ | -- | 0.520 | 2.278 | 2.278 | | PM ₁₀ | -- | | | | | PM ₁₀ | -- | 0.260 | 1.139 | 1.139 | |
| PM _{2.5} | -- | 0.205 | 0.898 | 0.898 | | PM _{2.5} | -- | | | | | PM _{2.5} | -- | 0.103 | 0.449 | 0.449 | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | |
| VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | |
| CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (1,2) | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1,2) | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1,2) | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom) | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom) | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom) | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chlor) | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor) | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor) | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | |
| | | | | | | | | | | | | Total HAPs | | | | | |

1a) AQ Facility ID number: 13900044 1b) Agency Interest ID number: 65
2) Facility name: Superior Minerals

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Emissions by Source Table

| | | | | | | | | | | | | | | | | | |
|--|-----------|-----------------------|-----------------------------|-----------------------|----------------------|--|-----------|-----------------------|-----------------------------|-----------------------|----------------------|--|-----------|-----------------------|-----------------------------|-----------------------|----------------------|
| 3a) Tempo SI ID number: EQUI90; STRU16, STRU18 | | | | | | 3a) Tempo SI ID number: EQUI91; STRU27 | | | | | | 3a) Tempo SI ID number: EQUI92; STRU17 | | | | | |
| 3b) Delta ID No.: EU103; SV001, SV002 | | | | | | 3b) Delta ID No.: EU104; SV012 | | | | | | 3b) Delta ID No.: EU105; SV002 | | | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | |
| Pollutant Name | CAS # | | | | Actual tons per year | Pollutant Name | CAS # | | | | Actual tons per year | Pollutant Name | CAS # | | | | Actual tons per year |
| PM | -- | 0.563 | 2.464 | 2.464 | | PM | -- | 0.007 | 0.033 | 0.033 | | PM | -- | 0.001 | 0.003 | 0.003 | |
| PM ₁₀ | -- | 0.260 | 1.139 | 1.139 | | PM ₁₀ | -- | 0.001 | 0.005 | 0.005 | | PM ₁₀ | -- | 0.000 | 0.001 | 0.001 | |
| PM _{2.5} | -- | 0.103 | 0.449 | 0.449 | | PM _{2.5} | -- | 0.000 | 0.002 | 0.002 | | PM _{2.5} | -- | 0.000 | 0.001 | 0.001 | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | |
| VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | |
| CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | |
| | | | | | | | | | | | | Total HAPs | | | | | |

1a) AQ Facility ID number: 13900044

2) Facility name: Superior Minerals

1b) Agency Interest ID number: 65

Follow the instructions to complete this spreadsheet. This spreadsheet can be copied into a tab for your emissions spreadsheet and must be submitted on a CD with your application. If you need to provide emissions information for more emissions units, add more sets of columns (3a through 3f) to the right as needed in the Emissions by Source table. If you need to provide information for more pollutants, add rows as needed.

Emissions by Source Table

| 3a) Tempo SI ID number: EQUI93 | | | | | | 3a) Tempo SI ID number: EQUI94; STRU17 | | | | | | 3a) Tempo SI ID number: EQUI95; STRU16, STRU17 | | | | | |
|--------------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|--|-----------|-----------------------|-----------------------------|-----------------------|----------------------|--|-----------|-----------------------|-----------------------------|-----------------------|----------------------|
| 3b) Delta ID No.: EU130 | | | | | | 3b) Delta ID No.: EU131; SV002 | | | | | | 3b) Delta ID No.: EU132; SV001, SV002 | | | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | |
| Pollutant Name | CAS # | | | | Actual tons per year | Pollutant Name | CAS # | | | | Actual tons per year | Pollutant Name | CAS # | | | | Actual tons per year |
| PM | -- | 0.060 | 0.263 | 0.263 | | PM | -- | 1.212 | 5.309 | 5.309 | | PM | -- | 0.090 | 0.394 | 0.394 | |
| PM ₁₀ | -- | 0.027 | 0.118 | 0.118 | | PM ₁₀ | -- | 1.017 | 4.454 | 4.454 | | PM ₁₀ | -- | 0.022 | 0.095 | 0.095 | |
| PM _{2.5} | -- | 0.005 | 0.022 | 0.022 | | PM _{2.5} | -- | 0.363 | 1.590 | 1.590 | | PM _{2.5} | -- | 0.022 | 0.095 | 0.095 | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | |
| VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | |
| CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | |
| | | | | | | | | | | | | Total HAPs | | | | | |

1a) AQ Facility ID number: 13900044
2) Facility name: Superior Minerals

1b) Agency Interest ID number: 65

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Emissions by Source Table

| 3a) Tempo SI ID number: EQUI96; STRU1 | | | | | | 3a) Tempo SI ID number: EQUI98; STRU14 | | | | | | 3a) Tempo SI ID number: EQUI99; STRU14, STRU26 | | | | | |
|---------------------------------------|-----------|-----------------------|-----------------------------|-----------------------|-----|--|-----------|-----------------------|-----------------------------|-----------------------|-----|--|-----------|-----------------------|-----------------------------|-----------------------|-----|
| 3b) Delta ID No.: EU133; SV014 | | | | | | 3b) Delta ID No.: EU135; SV027 | | | | | | 3b) Delta ID No.: EU136; SV011, SV027 | | | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | |
| Pollutant Name | CAS # | | | | | Pollutant Name | CAS # | | | | | Pollutant Name | CAS # | | | | |
| PM | -- | 0.150 | 0.657 | 0.657 | | PM | -- | 0.396 | 1.734 | 1.734 | | PM | -- | 0.396 | 1.734 | 1.734 | |
| PM ₁₀ | -- | 0.036 | 0.158 | 0.158 | | PM ₁₀ | -- | 0.064 | 0.280 | 0.280 | | PM ₁₀ | -- | 0.064 | 0.280 | 0.280 | |
| PM _{2.5} | -- | 0.036 | 0.158 | 0.158 | | PM _{2.5} | -- | 0.024 | 0.105 | 0.105 | | PM _{2.5} | -- | 0.024 | 0.105 | 0.105 | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | |
| VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | |
| CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (1,2) | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1,2) | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1,2) | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom) | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom) | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom) | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chlor) | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor) | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor) | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | |
| | | | | | | | | | | | | Total HAPs | | | | | |

1a) AQ Facility ID number: 13900044

2) Facility name: Superior Minerals

1b) Agency Interest ID number: 65

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Emissions by Source Table

| 3a) Tempo SI ID number: EQUI100; STRU4 | | | | | | 3a) Tempo SI ID number: EQUI101; STRU6, STRU13 | | | | | | 3a) Tempo SI ID number: EQUI102; STRU17 | | | | | |
|--|-----------|-----------------------|-----------------------------|-----------------------|----------------------|--|-----------|-----------------------|-----------------------------|-----------------------|----------------------|---|-----------|-----------------------|-----------------------------|-----------------------|----------------------|
| 3b) Delta ID No.: EQUI137; SV017 | | | | | | 3b) Delta ID No.: EU138; SV019, SV026 | | | | | | 3b) Delta ID No.: EU140; SV002 | | | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | |
| Pollutant Name | CAS # | | | | Actual tons per year | Pollutant Name | CAS # | | | | Actual tons per year | Pollutant Name | CAS # | | | | Actual tons per year |
| PM | -- | 0.068 | 0.296 | 0.296 | | PM | -- | 0.036 | 0.158 | 0.158 | | PM | -- | 0.476 | 2.084 | 2.084 | |
| PM ₁₀ | -- | 0.031 | 0.137 | 0.137 | | PM ₁₀ | -- | 0.013 | 0.058 | 0.058 | | PM ₁₀ | -- | 0.476 | 2.084 | 2.084 | |
| PM _{2.5} | -- | 0.012 | 0.054 | 0.054 | | PM _{2.5} | -- | 0.007 | 0.032 | 0.032 | | PM _{2.5} | -- | 0.476 | 2.084 | 2.084 | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | |
| VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | |
| CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | |
| | | | | | | | | | | | | Total HAPs | | | | | |

1a) AQ Facility ID number: 13900044 1b) Agency Interest ID number: 65
2) Facility name: Superior Minerals

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Emissions by Source Table

| | | | | | | | | | | | | | | | | | |
|---------------------------------|-----------|-----------------------|-----------------------------|-----------------------|-----|---|-----------|-----------------------|-----------------------------|-----------------------|-----|---|-----------|--|-----------------------------|-----------------------|-----|
| 3a) Tempo SI ID number: EQUI103 | | | | | | 3a) Tempo SI ID number: EQUI104; STRU16 | | | | | | 3a) Tempo SI ID number: EQUI105; STRU17 | | | | | |
| 3b) Delta ID No.: EU141 | | | | | | 3b) Delta ID No.: EU139; SV001 | | | | | | 3b) Delta ID No.: EU028; SV002 | | | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | |
| Pollutant Name | CAS # | | | | | Pollutant Name | CAS # | | | | | Pollutant Name | CAS # | | | | |
| PM | -- | 0.002 | 0.007 | 0.007 | | PM | -- | 0.675 | 2.957 | 2.957 | | PM | -- | Note: In parallel with Bin 1, 3, 13, 14, 23, 4 | | | |
| PM ₁₀ | -- | 0.001 | 0.002 | 0.002 | | PM ₁₀ | -- | 0.312 | 1.367 | 1.367 | | PM ₁₀ | -- | | | | |
| PM _{2.5} | -- | 0.000 | 0.001 | 0.001 | | PM _{2.5} | -- | 0.123 | 0.539 | 0.539 | | PM _{2.5} | -- | | | | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | |
| VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | |
| CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (1,2) | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1,2) | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1,2) | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom) | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom) | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom) | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chlor) | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor) | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor) | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | |
| | | | | | | | | | | | | Total HAPs | | | | | |

1a) AQ Facility ID number: 13900044 1b) Agency Interest ID number: 65
2) Facility name: Superior Minerals

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Emissions by Source Table

| 3a) Tempo SI ID number: EQUI106; STRU12, STRU14, STRU23, STRU27 | | | | | | 3a) Tempo SI ID number: EQUI107; STRU17 | | | | | | 3a) Tempo SI ID number: EQUI108; STRU26 | | | | | |
|---|-----------|-----------------------|-----------------------------|-----------------------|----------------------|---|-----------|--|-----------------------------|-----------------------|----------------------|---|-----------|-----------------------|-----------------------------|-----------------------|----------------------|
| 3b) Delta ID No.: EU029; SV008, SV027, SV012, SV025 | | | | | | 3b) Delta ID No.: EU030; SV002 | | | | | | 3b) Delta ID No.: EU031; SV011 | | | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | |
| Pollutant Name | CAS # | | | | Actual tons per year | Pollutant Name | CAS # | | | | Actual tons per year | Pollutant Name | CAS # | | | | Actual tons per year |
| PM | -- | 0.495 | 2.168 | 2.168 | | PM | -- | Note: In parallel with Bin 1, 3, 13, 14, 23, 4 | | | | PM | -- | 0.297 | 1.301 | 1.301 | |
| PM ₁₀ | -- | 0.080 | 0.350 | 0.350 | | PM ₁₀ | -- | | | | | PM ₁₀ | -- | 0.048 | 0.210 | 0.210 | |
| PM _{2.5} | -- | 0.030 | 0.131 | 0.131 | | PM _{2.5} | -- | | | | | PM _{2.5} | -- | 0.018 | 0.079 | 0.079 | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | |
| VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | |
| CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (1,2) | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1,2) | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1,2) | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom) | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom) | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom) | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chlor) | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor) | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor) | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | |
| | | | | | | | | | | | | Total HAPs | | | | | |

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1b) Agency Interest ID number: 65

2) Facility name: Superior Minerals

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Emissions by Source Table

| | | | | | | | | | | | | | | | | | |
|---|-----------|-----------------------|-----------------------------|-----------------------|----------------------|---|-----------|--|-----------------------------|-----------------------|----------------------|---------------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|
| 3a) Tempo SI ID number: EQUI109; STRU26 | | | | | | 3a) Tempo SI ID number: EQUI110; STRU17 | | | | | | 3a) Tempo SI ID number: EQUI116 | | | | | |
| 3b) Delta ID No.: EU032; SV011 | | | | | | 3b) Delta ID No.: EU033; SV002 | | | | | | 3b) Delta ID No.: | | | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | |
| Pollutant Name | CAS # | | | | Actual tons per year | Pollutant Name | CAS # | | | | Actual tons per year | Pollutant Name | CAS # | | | | Actual tons per year |
| PM | -- | 0.297 | 1.301 | 1.301 | | PM | -- | Note: In parallel with Bin 1, 3, 13, 14, 23, 4 | | | | PM | -- | 0.044 | 0.192 | 0.192 | |
| PM ₁₀ | -- | 0.048 | 0.210 | 0.210 | | PM ₁₀ | -- | | | | | PM ₁₀ | -- | 0.014 | 0.063 | 0.063 | |
| PM _{2.5} | -- | 0.018 | 0.079 | 0.079 | | PM _{2.5} | -- | | | | | PM _{2.5} | -- | 0.004 | 0.018 | 0.018 | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | |
| VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | |
| CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | |
| | | | | | | | | | | | | Total HAPs | | | | | |

1a) AQ Facility ID number: 13900044

2) Facility name: Superior Minerals

1b) Agency Interest ID number: 65

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Emissions by Source Table

| 3a) Tempo SI ID number: | | EQUI118 | | | | 3a) Tempo SI ID number: | | EQUI119 | | | | 3a) Tempo SI ID number: | | EQUI120 | | | |
|---------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|---------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|---------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|
| 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: | | | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year |
| PM | -- | 0.044 | 0.192 | 0.192 | | PM | -- | 0.044 | 0.192 | 0.192 | | PM | -- | 0.044 | 0.192 | 0.192 | |
| PM ₁₀ | -- | 0.014 | 0.063 | 0.063 | | PM ₁₀ | -- | 0.014 | 0.063 | 0.063 | | PM ₁₀ | -- | 0.014 | 0.063 | 0.063 | |
| PM _{2.5} | -- | 0.004 | 0.018 | 0.018 | | PM _{2.5} | -- | 0.004 | 0.018 | 0.018 | | PM _{2.5} | -- | 0.004 | 0.018 | 0.018 | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | |
| VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | |
| CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (1,2) | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1,2) | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1,2) | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom) | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom) | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom) | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chlor) | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor) | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor) | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | |
| | | | | | | | | | | | | Total HAPs | | | | | |

1a) AQ Facility ID number: 13900044

2) Facility name: Superior Minerals

1b) Agency Interest ID number: 65

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Emissions by Source Table

| 3a) Tempo SI ID number: | | EQUI121 | | | | 3a) Tempo SI ID number: | | | | EQUI122 | | | | 3a) Tempo SI ID number: | | | | EQUI123 | | | |
|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|-----|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|-----|-------------------------|-----------|-------------------------|-----------------------------|-----------------------|-----|---------|--|--|--|
| 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: | | | | | | | | 3b) Delta ID No.: | | | | | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | | | | |
| | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | | |
| Pollutant Name | CAS # | | | | | Pollutant Name | CAS # | | | | | Pollutant Name | CAS # | | | | | | | | |
| PM | -- | 0.044 | 0.192 | 0.192 | | PM | -- | 0.044 | 0.192 | 0.192 | | PM | -- | 0.044 | 0.192 | 0.192 | | | | | |
| PM ₁₀ | -- | 0.014 | 0.063 | 0.063 | | PM ₁₀ | -- | 0.014 | 0.063 | 0.063 | | PM ₁₀ | -- | 0.014 | 0.063 | 0.063 | | | | | |
| PM _{2.5} | -- | 0.004 | 0.018 | 0.018 | | PM _{2.5} | -- | 0.004 | 0.018 | 0.018 | | PM _{2.5} | -- | 0.004 | 0.018 | 0.018 | | | | | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | | | | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | | | | |
| VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | | | | |
| CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | | | | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | | | | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | | | | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | | | | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | | | | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | | | | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | | | | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | | | | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | | | | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | | | | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | | | | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | | | | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | | | | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | | | | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | | | | |
| Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | | | | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | | | | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | | | | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | | | | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | | | | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | | | | |
| Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | | | | |
| Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | | | | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | | | | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | | | | |
| POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | | | | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | | | | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | | | | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | | | | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | | | | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | | | | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | | | | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | | | | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | | | | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | | | | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | | | | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | | | | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | | | | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | | | | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | | | | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | | | | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | | | | |
| | | | | | | | | | | | | Total HAPs | | | | | | | | | |

1a) AQ Facility ID number: 13900044

2) Facility name: Superior Minerals

1b) Agency Interest ID number: 65

Follow the instructions to complete this spreadsheet. This spreadsheet can be copied into a tab for your emissions spreadsheet and must be submitted on a CD with your application. If you need to provide emissions information for more emissions units, add more sets of columns (3a through 3f) to the right as needed in the Emissions by Source table. If you need to provide information for more pollutants, add rows as needed.

Emissions by Source Table

| | | | | | | | | | | | | | | | | | |
|---------------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|---------------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|--|-----------|-----------------------|-----------------------------|-----------------------|----------------------|
| 3a) Tempo SI ID number: EQUI124 | | | | | | 3a) Tempo SI ID number: EQUI125 | | | | | | 3a) Tempo SI ID number: EQUI126; STRU9 | | | | | |
| 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: SV022 | | | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | |
| Pollutant Name | CAS # | | | | Actual tons per year | Pollutant Name | CAS # | | | | Actual tons per year | Pollutant Name | CAS # | | | | Actual tons per year |
| PM | -- | 0.044 | 0.192 | 0.192 | | PM | -- | 0.044 | 0.192 | 0.192 | | PM | -- | 0.059 | 0.260 | 0.260 | |
| PM ₁₀ | -- | 0.014 | 0.063 | 0.063 | | PM ₁₀ | -- | 0.014 | 0.063 | 0.063 | | PM ₁₀ | -- | 0.010 | 0.042 | 0.042 | |
| PM _{2.5} | -- | 0.004 | 0.018 | 0.018 | | PM _{2.5} | -- | 0.004 | 0.018 | 0.018 | | PM _{2.5} | -- | 0.004 | 0.016 | 0.016 | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | |
| VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | |
| CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | |
| | | | | | | | | | | | | Total HAPs | | | | | |

1a) AQ Facility ID number: 13900044 1b) Agency Interest ID number: 65
2) Facility name: Superior Minerals

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Emissions by Source Table

| | | | | | | | | | | | | | | | | | |
|--|-----------|-----------------------|-----------------------------|-----------------------|----------------------|---------------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|---------------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|
| 3a) Tempo SI ID number: EQUI127; STRU9 | | | | | | 3a) Tempo SI ID number: EQUI128 | | | | | | 3a) Tempo SI ID number: EQUI129 | | | | | |
| 3b) Delta ID No.: SV022 | | | | | | 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: | | | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | |
| Pollutant Name | CAS # | | | | Actual tons per year | Pollutant Name | CAS # | | | | Actual tons per year | Pollutant Name | CAS # | | | | Actual tons per year |
| PM | -- | 0.059 | 0.260 | 0.260 | | PM | -- | 0.880 | 3.854 | 3.854 | | PM | -- | 0.056 | 0.245 | 0.245 | |
| PM ₁₀ | -- | 0.010 | 0.042 | 0.042 | | PM ₁₀ | -- | 0.296 | 1.296 | 1.296 | | PM ₁₀ | -- | 0.018 | 0.081 | 0.081 | |
| PM _{2.5} | -- | 0.004 | 0.016 | 0.016 | | PM _{2.5} | -- | 0.296 | 1.296 | 1.296 | | PM _{2.5} | -- | 0.005 | 0.023 | 0.023 | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | |
| VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | |
| CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (1,2) | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1,2) | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1,2) | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom) | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom) | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom) | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chlor) | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor) | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor) | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | |
| | | | | | | | | | | | | Total HAPs | | | | | |

1a) AQ Facility ID number: 13900044

2) Facility name: Superior Minerals

1b) Agency Interest ID number: 65

Follow the instructions to complete this spreadsheet. This spreadsheet can be copied into a tab for your emissions spreadsheet and must be submitted on a CD with your application. If you need to provide emissions information for more emissions units, add more sets of columns (3a through 3f) to the right as needed in the Emissions by Source table. If you need to provide information for more pollutants, add rows as needed.

Emissions by Source Table

| 3a) Tempo SI ID number: EQUI130 | | | | | | 3a) Tempo SI ID number: EQUI131 | | | | | | 3a) Tempo SI ID number: EQUI132 | | | | | |
|---------------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|---------------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|---------------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|
| 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: | | | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | |
| Pollutant Name | CAS # | | | | Actual tons per year | Pollutant Name | CAS # | | | | Actual tons per year | Pollutant Name | CAS # | | | | Actual tons per year |
| PM | -- | 0.056 | 0.245 | 0.245 | | PM | -- | 0.732 | 3.208 | 3.208 | | PM | -- | 0.732 | 3.208 | 3.208 | |
| PM ₁₀ | -- | 0.018 | 0.081 | 0.081 | | PM ₁₀ | -- | 0.346 | 1.517 | 1.517 | | PM ₁₀ | -- | 0.346 | 1.517 | 1.517 | |
| PM _{2.5} | -- | 0.005 | 0.023 | 0.023 | | PM _{2.5} | -- | 0.052 | 0.230 | 0.230 | | PM _{2.5} | -- | 0.052 | 0.230 | 0.230 | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | |
| VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | |
| CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | |
| | | | | | | | | | | | | Total HAPs | | | | | |

1a) AQ Facility ID number: 13900044

1b) Agency Interest ID number: 65

2) Facility name: Superior Minerals

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Emissions by Source Table

| | | | | | | | | | | | | | | | | | |
|---------------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|---------------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|---------------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|
| 3a) Tempo SI ID number: EQUI133 | | | | | | 3a) Tempo SI ID number: EQUI134 | | | | | | 3a) Tempo SI ID number: EQUI135 | | | | | |
| 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: | | | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | |
| Pollutant Name | CAS # | | | | Actual tons per year | Pollutant Name | CAS # | | | | Actual tons per year | Pollutant Name | CAS # | | | | Actual tons per year |
| PM | -- | 0.297 | 1.303 | 1.303 | | PM | -- | 0.458 | 2.005 | 2.005 | | PM | -- | 0.297 | 1.303 | 1.303 | |
| PM ₁₀ | -- | 0.141 | 0.616 | 0.616 | | PM ₁₀ | -- | 0.217 | 0.948 | 0.948 | | PM ₁₀ | -- | 0.141 | 0.616 | 0.616 | |
| PM _{2.5} | -- | 0.021 | 0.093 | 0.093 | | PM _{2.5} | -- | 0.033 | 0.144 | 0.144 | | PM _{2.5} | -- | 0.021 | 0.093 | 0.093 | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | |
| VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | |
| CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (1,2) | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1,2) | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1,2) | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom) | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom) | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom) | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chlor) | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor) | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor) | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | |
| | | | | | | | | | | | | Total HAPs | | | | | |

1a) AQ Facility ID number: 13900044

2) Facility name: Superior Minerals

1b) Agency Interest ID number: 65

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Emissions by Source Table

| 3a) Tempo SI ID number: EQUI143 | | | | | | 3b) Tempo SI ID number: EQUI144; STRU1 - Separation Equipment (Previous TREa) | | | | | | 3a) Tempo SI ID number: EQUI145; STRU3 - Separation Equipment (Previous TREa) | | | | | |
|---------------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|---|-----------|-----------------------|-----------------------------|-----------------------|----------------------|---|-----------|-----------------------|-----------------------------|-----------------------|----------------------|
| 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: | | | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | |
| Pollutant Name | CAS # | | | | Actual tons per year | Pollutant Name | CAS # | | | | Actual tons per year | Pollutant Name | CAS # | | | | Actual tons per year |
| PM | -- | 0.458 | 2.005 | 2.005 | | PM | -- | 6.503 | 28.482 | 28.482 | | PM | -- | 2.140 | 9.374 | 9.374 | |
| PM ₁₀ | -- | 0.217 | 0.948 | 0.948 | | PM ₁₀ | -- | 3.976 | 17.414 | 17.414 | | PM ₁₀ | -- | 1.369 | 5.998 | 5.998 | |
| PM _{2.5} | -- | 0.033 | 0.144 | 0.144 | | PM _{2.5} | -- | 1.809 | 7.921 | 7.921 | | PM _{2.5} | -- | 0.509 | 2.231 | 2.231 | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | 0.082 | 0.359 | 0.359 | | SO ₂ | -- | 5.29E-03 | 2.32E-02 | 2.32E-02 | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | 8.328 | 36.475 | 36.475 | | NO _x | -- | 0.882 | 3.865 | 3.865 | |
| VOC | -- | -- | -- | -- | | VOC | -- | 0.167 | 0.733 | 0.733 | | VOC | -- | 0.049 | 0.213 | 0.213 | |
| CO | -- | -- | -- | -- | | CO | -- | 2.950 | 12.919 | 12.919 | | CO | -- | 0.741 | 3.246 | 3.246 | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | 4.39E-04 | 1.92E-03 | 1.92E-03 | | Lead | 7439-92-1 | 4.41E-06 | 1.93E-05 | 1.93E-05 | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | 0.067 | 0.293 | 0.293 | | N ₂ O (mass) | -- | 1.98E-03 | 8.69E-03 | 8.69E-03 | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | 0.351 | 1.535 | 1.535 | | CH ₄ (mass) | -- | 1.98E-02 | 8.69E-02 | 8.69E-02 | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | 9.581.15 | 41,965.43 | 41,965.43 | | CO ₂ (mass) | -- | 1,052.78 | 4,611.20 | 4,611.20 | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | 9,609.81 | 42,090.96 | 42,090.96 | | CO ₂ e | -- | 1,053.87 | 4,615.93 | 4,615.93 | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | 1.04E-04 | 4.57E-04 | 4.57E-04 | | Benzene | 71-43-2 | 1.85E-05 | 8.12E-05 | 8.12E-05 | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | 1.76E-05 | 7.73E-05 | 7.73E-05 | | 1,4-Dichlorobenzene | 106-46-7 | 1.06E-05 | 4.64E-05 | 4.64E-05 | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | 2.18E-05 | 9.55E-05 | 9.55E-05 | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | 1.24E-02 | 5.44E-02 | 5.44E-02 | | Formaldehyde | 50-00-0 | 6.62E-04 | 2.90E-03 | 2.90E-03 | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | 2.65E-02 | 1.16E-01 | 1.16E-01 | | Hexane | 110-54-3 | 1.59E-02 | 6.96E-02 | 6.96E-02 | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | 3.96E-04 | 1.74E-03 | 1.74E-03 | | Naphthalene | 91-20-3 | 5.38E-06 | 2.36E-05 | 2.36E-05 | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | -- | -- | -- | | POM | -- | 4.18E-04 | 1.83E-03 | 1.83E-03 | | POM | -- | 6.16E-06 | 2.70E-05 | 2.70E-05 | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | 2.18E-03 | 9.53E-03 | 9.53E-03 | | Toluene | 108-88-3 | 3.00E-05 | 1.31E-04 | 1.31E-04 | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | 3.74E-05 | 1.64E-04 | 1.64E-04 | | o-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | 1.95E-04 | 8.54E-04 | 8.54E-04 | | Arsenic | 7440-38-2 | 1.76E-06 | 7.73E-06 | 7.73E-06 | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | 1.44E-04 | 6.31E-04 | 6.31E-04 | | Beryllium | 7440-41-7 | 1.06E-07 | 4.64E-07 | 4.64E-07 | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | 1.60E-04 | 7.02E-04 | 7.02E-04 | | Cadmium | 7440-43-9 | 9.71E-06 | 4.25E-05 | 4.25E-05 | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | 1.65E-04 | 7.21E-04 | 7.21E-04 | | Chromium | 7440-47-3 | 1.24E-05 | 5.41E-05 | 5.41E-05 | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | 1.24E-06 | 5.41E-06 | 5.41E-06 | | Cobalt | 7440-48-4 | 7.41E-07 | 3.25E-06 | 3.25E-06 | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | 2.94E-04 | 1.29E-03 | 1.29E-03 | | Manganese | 7439-96-5 | 3.35E-06 | 1.47E-05 | 1.47E-05 | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | 1.48E-04 | 6.47E-04 | 6.47E-04 | | Mercury | 7439-97-6 | 2.29E-06 | 1.00E-05 | 1.00E-05 | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | 1.75E-04 | 7.66E-04 | 7.66E-04 | | Nickel | 7440-02-0 | 1.85E-05 | 8.12E-05 | 8.12E-05 | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | 7.20E-04 | 3.16E-03 | 3.16E-03 | | Selenium | 7782-49-2 | 2.12E-07 | 9.28E-07 | 9.28E-07 | |
| | | | | | | | | 0.044 | 0.191 | 0.191 | | Total HAPs | | 0.017 | 0.073 | 0.073 | |

1a) AQ Facility ID number: 13900044 1b) Agency Interest ID number: 65
2) Facility name: Superior Minerals

Follow the instructions to complete this spreadsheet. This spreadsheet can be copied into a tab for your emissions spreadsheet and must be submitted on a CD with your application. If you need to provide emissions information for more emissions units, add more sets of columns (3a through 3f) to the right as needed in the Emissions by Source table. If you need to provide information for more pollutants, add rows as needed.

Emissions by Source Table

| 3a) Tempo SI ID number: EQUI146; STRU4 - Separation Equipment (Previous TREA) | | | | | | 3a) Tempo SI ID number: EQUI147; STRU6 - Separation Equipment (Previous TREA) | | | | | | 3a) Tempo SI ID number: EQUI148; STRU9 - Separation Equipment (Previous TREA) | | | | | |
|---|-----------|-----------------------|-----------------------------|-----------------------|--------------------------|---|-----------|-----------------------|-----------------------------|-----------------------|--------------------------|---|-----------|-----------------------|-----------------------------|-----------------------|--------------------------|
| 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: | | | | | |
| 3c) Pollutant Name | 3d) CAS # | 3e) Potential | | | 3f) Actual tons per year | 3c) Pollutant Name | 3d) CAS # | 3e) Potential | | | 3f) Actual tons per year | 3c) Pollutant Name | 3d) CAS # | 3e) Potential | | | 3f) Actual tons per year |
| | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | |
| PM | -- | 0.630 | 2.759 | 2.759 | | PM | -- | 0.048 | 0.209 | 0.209 | | PM | -- | 0.198 | 0.867 | 0.867 | |
| PM ₁₀ | -- | 0.291 | 1.275 | 1.275 | | PM ₁₀ | -- | 0.011 | 0.050 | 0.050 | | PM ₁₀ | -- | 0.032 | 0.140 | 0.140 | |
| PM _{2.5} | -- | 0.115 | 0.503 | 0.503 | | PM _{2.5} | -- | 0.005 | 0.024 | 0.024 | | PM _{2.5} | -- | 0.012 | 0.053 | 0.053 | |
| SO ₂ | -- | 1.18E-03 | 5.15E-03 | 5.15E-03 | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | 0.196 | 0.859 | 0.859 | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | |
| VOC | -- | 0.011 | 0.047 | 0.047 | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | |
| CO | -- | 0.165 | 0.721 | 0.721 | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | 9.80E-07 | 4.29E-06 | 4.29E-06 | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | 4.41E-04 | 1.93E-03 | 1.93E-03 | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | 4.41E-03 | 1.93E-02 | 1.93E-02 | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | 233.95 | 1,024.71 | 1,024.71 | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | 234.19 | 1,025.76 | 1,025.76 | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | 4.12E-06 | 1.80E-05 | 1.80E-05 | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | 2.35E-06 | 1.03E-05 | 1.03E-05 | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | 1.47E-04 | 6.44E-04 | 6.44E-04 | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | 3.53E-03 | 1.55E-02 | 1.55E-02 | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | 1.20E-06 | 5.24E-06 | 5.24E-06 | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | 1.37E-06 | 6.00E-06 | 6.00E-06 | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | 6.67E-06 | 2.92E-05 | 2.92E-05 | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | 3.92E-07 | 1.72E-06 | 1.72E-06 | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | |
| Beryllium | 7440-41-7 | 2.35E-08 | 1.03E-07 | 1.03E-07 | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | |
| Cadmium | 7440-43-9 | 2.16E-06 | 9.45E-06 | 9.45E-06 | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | |
| Chromium | 7440-47-3 | 2.75E-06 | 1.20E-05 | 1.20E-05 | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | |
| Cobalt | 7440-48-4 | 1.65E-07 | 7.21E-07 | 7.21E-07 | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | |
| Manganese | 7439-96-5 | 7.45E-07 | 3.26E-06 | 3.26E-06 | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | |
| Mercury | 7439-97-6 | 5.10E-07 | 2.23E-06 | 2.23E-06 | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | |
| Nickel | 7440-02-0 | 4.12E-06 | 1.80E-05 | 1.80E-05 | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | |
| Selenium | 7782-49-2 | 4.71E-08 | 2.06E-07 | 2.06E-07 | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | |
| | | 0.004 | 0.016 | 0.016 | | | | | | | | Total HAPs | | | | | |

1a) AQ Facility ID number: 13900044
2) Facility name: Superior Minerals

1b) Agency Interest ID number: 65

Follow the instructions to complete this spreadsheet. This spreadsheet can be copied into a tab for your emissions spreadsheet and must be submitted on a CD with your application. If you need to provide emissions information for more emissions units, add more sets of columns (3a through 3f) to the right as needed in the Emissions by Source table. If you need to provide information for more pollutants, add rows as needed.

Emissions by Source Table

| 3a) Tempo SI ID number: | | EQUI149; STRU10 - Separation Equipment (Previous TREA) | | | | 3a) Tempo SI ID number: | | EQUI150; STRU12 - Separation Equipment (Previous TREA) | | | | 3a) Tempo SI ID number: | | EQUI151; STRU13 - Separation Equipment (Previous TREA) | | | |
|-------------------------|-----------|--|-----------------------------|-----------------------|----------------------|-------------------------|-----------|--|-----------------------------|-----------------------|----------------------|-------------------------|-----------|--|-----------------------------|-----------------------|----------------------|
| 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: | | | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year |
| PM | -- | 0.322 | 1.410 | 1.410 | | PM | -- | 0.498 | 2.183 | 2.183 | | PM | -- | 0.048 | 0.209 | 0.209 | |
| PM ₁₀ | -- | 0.175 | 0.768 | 0.768 | | PM ₁₀ | -- | 0.081 | 0.353 | 0.353 | | PM ₁₀ | -- | 0.011 | 0.050 | 0.050 | |
| PM _{2.5} | -- | 0.100 | 0.437 | 0.437 | | PM _{2.5} | -- | 0.030 | 0.132 | 0.132 | | PM _{2.5} | -- | 0.005 | 0.024 | 0.024 | |
| SO ₂ | -- | 1.00E-02 | 4.38E-02 | 4.38E-02 | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | 1.667 | 7.300 | 7.300 | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | |
| VOC | -- | 0.092 | 0.402 | 0.402 | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | |
| CO | -- | 1.400 | 6.132 | 6.132 | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | 8.33E-06 | 3.65E-05 | 3.65E-05 | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | 3.75E-03 | 1.64E-02 | 1.64E-02 | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | 3.75E-02 | 1.64E-01 | 1.64E-01 | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | 1,988.59 | 8,710.04 | 8,710.04 | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | 1,990.64 | 8,718.99 | 8,718.99 | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | 3.50E-05 | 1.53E-04 | 1.53E-04 | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | 2.00E-05 | 8.76E-05 | 8.76E-05 | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | 1.25E-03 | 5.48E-03 | 5.48E-03 | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | 3.00E-02 | 1.31E-01 | 1.31E-01 | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | 1.02E-05 | 4.45E-05 | 4.45E-05 | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | 1.16E-05 | 5.10E-05 | 5.10E-05 | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | 5.67E-05 | 2.48E-04 | 2.48E-04 | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | 3.33E-06 | 1.46E-05 | 1.46E-05 | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | |
| Beryllium | 7440-41-7 | 2.00E-07 | 8.76E-07 | 8.76E-07 | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | |
| Cadmium | 7440-43-9 | 1.83E-05 | 8.03E-05 | 8.03E-05 | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | |
| Chromium | 7440-47-3 | 2.33E-05 | 1.02E-04 | 1.02E-04 | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | |
| Cobalt | 7440-48-4 | 1.40E-06 | 6.13E-06 | 6.13E-06 | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | |
| Manganese | 7439-96-5 | 6.33E-06 | 2.77E-05 | 2.77E-05 | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | |
| Mercury | 7439-97-6 | 4.33E-06 | 1.90E-05 | 1.90E-05 | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | |
| Nickel | 7440-02-0 | 3.50E-05 | 1.53E-04 | 1.53E-04 | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | |
| Selenium | 7782-49-2 | 4.00E-07 | 1.75E-06 | 1.75E-06 | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | |
| | | 0.031 | 0.138 | 0.138 | | | | | | | | Total HAPs | | | | | |

1a) AQ Facility ID number: 13900044

1b) Agency Interest ID number: 65

2) Facility name: Superior Minerals

Follow the instructions to complete this spreadsheet. This spreadsheet can be copied into a tab for your emissions spreadsheet and must be submitted on a CD with your application. If you need to provide emissions information for more emissions units, add more sets of columns (3a through 3f) to the right as needed in the Emissions by Source table. If you need to provide information for more pollutants, add rows as needed.

Emissions by Source Table

| 3a) Tempo SI ID number: EQUI152; STRU14 - Separation Equipment (Previous TREa) | | | | | | 3a) Tempo SI ID number: EQUI153; STRU16 - Separation Equipment (Previous TREa) | | | | | | 3a) Tempo SI ID number: EQUI154; STRU17 - Separation Equipment (Previous TREa) | | | | | |
|--|-----------|-----------------------|-----------------------------|-----------------------|-----|--|-----------|-----------------------|-----------------------------|-----------------------|-----|--|-----------|-----------------------|-----------------------------|-----------------------|-----|
| 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: | | | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | |
| Pollutant Name | CAS # | | | | | Pollutant Name | CAS # | | | | | Pollutant Name | CAS # | | | | |
| PM | -- | 1.753 | 7.678 | 7.678 | | PM | -- | 3.196 | 13.997 | 13.997 | | PM | -- | 4.154 | 18.196 | 18.196 | |
| PM ₁₀ | -- | 0.283 | 1.241 | 1.241 | | PM ₁₀ | -- | 2.193 | 9.606 | 9.606 | | PM ₁₀ | -- | 1.903 | 8.335 | 8.335 | |
| PM _{2.5} | -- | 0.106 | 0.465 | 0.465 | | PM _{2.5} | -- | 0.835 | 3.659 | 3.659 | | PM _{2.5} | -- | 1.014 | 4.442 | 4.442 | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | 6.47E-03 | 2.83E-02 | 2.83E-02 | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | 1.078 | 4.724 | 4.724 | | NO _x | -- | -- | -- | -- | |
| VOC | -- | -- | -- | -- | | VOC | -- | 0.059 | 0.260 | 0.260 | | VOC | -- | -- | -- | -- | |
| CO | -- | -- | -- | -- | | CO | -- | 0.906 | 3.968 | 3.968 | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | 5.39E-06 | 2.36E-05 | 2.36E-05 | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | 2.43E-03 | 1.06E-02 | 1.06E-02 | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | 2.43E-02 | 1.06E-01 | 1.06E-01 | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | 1.286.74 | 5,635.91 | 5,635.91 | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | 1,288.06 | 5,641.70 | 5,641.70 | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | 2.26E-05 | 9.92E-05 | 9.92E-05 | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | 1.29E-05 | 5.67E-05 | 5.67E-05 | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | 8.09E-04 | 3.54E-03 | 3.54E-03 | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | 1.94E-02 | 8.50E-02 | 8.50E-02 | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | 6.58E-06 | 2.88E-05 | 2.88E-05 | | Naphthalene | 91-20-3 | -- | -- | -- | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | -- | -- | -- | | POM | -- | 7.53E-06 | 3.30E-05 | 3.30E-05 | | POM | -- | -- | -- | -- | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | 3.67E-05 | 1.61E-04 | 1.61E-04 | | Toluene | 108-88-3 | -- | -- | -- | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | 2.16E-06 | 9.45E-06 | 9.45E-06 | | Arsenic | 7440-38-2 | -- | -- | -- | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | 1.29E-07 | 5.67E-07 | 5.67E-07 | | Beryllium | 7440-41-7 | -- | -- | -- | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | 1.19E-05 | 5.20E-05 | 5.20E-05 | | Cadmium | 7440-43-9 | -- | -- | -- | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | 1.51E-05 | 6.61E-05 | 6.61E-05 | | Chromium | 7440-47-3 | -- | -- | -- | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | 9.06E-07 | 3.97E-06 | 3.97E-06 | | Cobalt | 7440-48-4 | -- | -- | -- | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | 4.10E-06 | 1.79E-05 | 1.79E-05 | | Manganese | 7439-96-5 | -- | -- | -- | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | 2.80E-06 | 1.23E-05 | 1.23E-05 | | Mercury | 7439-97-6 | -- | -- | -- | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | 2.26E-05 | 9.92E-05 | 9.92E-05 | | Nickel | 7440-02-0 | -- | -- | -- | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | 2.59E-07 | 1.13E-06 | 1.13E-06 | | Selenium | 7782-49-2 | -- | -- | -- | |
| | | | | | | | | 0.020 | 0.089 | 0.089 | | Total HAPs | | | | | |

1a) AQ Facility ID number: 13900044

1b) Agency Interest ID number: 65

2) Facility name: Superior Minerals

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Emissions by Source Table

| 3a) Tempo SI ID number: EQUI155; STRU18 - Separation Equipment (Previous TREA) | | | | | | 3a) Tempo SI ID number: EQUI156; STRU23 - Separation Equipment (Previous TREA) | | | | | | 3a) Tempo SI ID number: EQUI157; STRU26 - Separation Equipment (Previous TREA) | | | | | |
|--|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|--|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|--|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|
| 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: | | | | | |
| 3c) | Pollutant Name | CAS # | 3e) Potential | | | 3f) | Pollutant Name | CAS # | 3e) Potential | | | 3f) | Pollutant Name | CAS # | 3e) Potential | | |
| | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited |
| | PM | -- | 0.516 | 2.258 | 1.243 | | PM | -- | 0.498 | 2.183 | 2.183 | | PM | -- | 0.792 | 3.469 | 3.469 |
| | PM ₁₀ | -- | 0.216 | 0.946 | 0.596 | | PM ₁₀ | -- | 0.081 | 0.353 | 0.353 | | PM ₁₀ | -- | 0.128 | 0.561 | 0.561 |
| | PM _{2.5} | -- | 0.137 | 0.601 | 0.601 | | PM _{2.5} | -- | 0.030 | 0.132 | 0.132 | | PM _{2.5} | -- | 0.048 | 0.210 | 0.210 |
| | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- |
| | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- |
| | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- |
| | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- |
| | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- |
| | GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | |
| | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- |
| | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- |
| | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- |
| | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- |
| | HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | |
| | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- |
| | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- |
| | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- |
| | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- |
| | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- |
| | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- |
| | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- |
| | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- |
| | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- |
| | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- |
| | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- |
| | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- |
| | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- |
| | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- |
| | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- |
| | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- |
| | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- |
| | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- |
| | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- |
| | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- |
| | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- |
| | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- |
| | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- |
| | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- |
| | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- |
| | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- |
| | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- |
| | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- |
| | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- |
| | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- |
| | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- |
| | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- |
| | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- |
| | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- |
| | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- |
| | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- |
| | | | | | | | | | | | | | Total HAPs | | | | |

1a) AO Facility ID number: 13900044

1b) Agency Interest ID number: 65

2) Facility name: Superior Minerals

Follow the instructions to complete this spreadsheet. This spreadsheet can be copied into a tab for your emissions spreadsheet and must be submitted on a CD with your application. If you need to provide emissions information for more emissions units, add more sets of columns (3a through 3f) to the right as needed in the Emissions by Source table. If you need to provide information for more pollutants, add rows as needed.

Emissions by Source Table

| 3a) Tempo SI ID number: | | EQUI158; STRU27 - Separation Equipment (Previous TREa) | | | | 3a) Tempo SI ID number: | | EQUI159; STRU3 | | | | 3a) Tempo SI ID number: | | EQUI160; STRU14 | | | |
|-------------------------|-----------|--|-----------------------------|-----------------------|----------------------|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|
| 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: | | EU098; SV016 | | | | 3b) Delta ID No.: | | SV027 | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year |
| PM | -- | 0.506 | 2.215 | 2.215 | | PM | -- | 0.563 | 2.464 | 2.464 | | PM | -- | 0.045 | 0.198 | 0.198 | |
| PM ₁₀ | -- | 0.082 | 0.358 | 0.358 | | PM ₁₀ | -- | 0.260 | 1.139 | 1.139 | | PM ₁₀ | -- | 0.007 | 0.032 | 0.032 | |
| PM _{2.5} | -- | 0.031 | 0.134 | 0.134 | | PM _{2.5} | -- | 0.103 | 0.449 | 0.449 | | PM _{2.5} | -- | 0.003 | 0.012 | 0.012 | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | |
| VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | |
| CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | |

GI-07 Spreadsheet

Facility Emissions Summary

Air Quality Permit Program
Doc Type: Permit Application

| | |
|----------------------------|-------------------|
| 1a) AQ Facility ID number: | 13900044 |
| 2) Facility name: | Superior Minerals |

1b) Agency Interest ID number: 65

Follow the instructions to complete this spreadsheet. This spreadsheet can be copied into a tab for your emissions spreadsheet and must be submitted on a CD with your application. If you need to provide emissions information for more emissions units, add more sets of columns (3a through 3f) to the right as needed in the Emissions by Source table. If you need to provide information for more pollutants, add rows as needed.

Emissions by Source Table

| 3a) Tempo SI ID number: | | FUGI43 | | | | 3a) Tempo SI ID number: | | FUGI44 | | | | 3a) Tempo SI ID number: | | FUGI45 | | | |
|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|-----|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|-----|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|-----|
| 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: | | | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | |
| Pollutant Name | CAS # | | | | | Pollutant Name | CAS # | | | | | Pollutant Name | CAS # | | | | |
| PM | -- | 0.915 | 4.007 | 4.007 | | PM | -- | 0.224 | 0.981 | 0.981 | | PM | -- | 0.625 | 2.738 | 2.738 | |
| PM ₁₀ | -- | 0.280 | 1.227 | 1.227 | | PM ₁₀ | -- | 0.106 | 0.464 | 0.464 | | PM ₁₀ | -- | 0.625 | 2.738 | 2.738 | |
| PM _{2.5} | -- | 0.028 | 0.124 | 0.124 | | PM _{2.5} | -- | 0.016 | 0.070 | 0.070 | | PM _{2.5} | -- | 0.625 | 2.738 | 2.738 | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | |
| VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | |
| CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | |
| | | | | | | Total HAPs | | | | | | | | | | | |

1b) Agency Interest ID number: 65

Emissions by Source Table

| 3a) Tempo SI ID number: | | FUGI46 | | | | 3a) Tempo SI ID number: | | FUGI47 | | | | 3a) Tempo SI ID number: | | FUGI48 | | | |
|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|-----|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|-----|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|-----|
| 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: | | | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | |
| Pollutant Name | CAS # | | | | | Pollutant Name | CAS # | | | | | Pollutant Name | CAS # | | | | |
| PM | -- | 0.606 | 2.654 | 2.654 | | PM | -- | 0.689 | 1.071 | 1.071 | | PM | -- | 0.236 | 1.033 | 1.033 | |
| PM ₁₀ | -- | 0.606 | 2.654 | 2.654 | | PM ₁₀ | -- | 0.081 | 0.127 | 0.127 | | PM ₁₀ | -- | 0.112 | 0.489 | 0.489 | |
| PM _{2.5} | -- | 0.606 | 2.654 | 2.654 | | PM _{2.5} | -- | 0.049 | 0.077 | 0.077 | | PM _{2.5} | -- | 0.017 | 0.074 | 0.074 | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | |
| VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | |
| CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | |
| | | | | | | Total HAPs | | | | | | | | | | | |

GI-07 Spreadsheet

Facility Emissions Summary

Air Quality Permit Program
Doc Type: Permit Application

| | |
|----------------------------|-------------------|
| 1a) AQ Facility ID number: | 13900044 |
| 2) Facility name: | Superior Minerals |

1b) Agency Interest ID number: 65

Follow the instructions to complete this spreadsheet. This spreadsheet can be copied into a tab for your emissions spreadsheet and must be submitted on a CD with your application. If you need to provide emissions information for more emissions units, add more sets of columns (3a through 3f) to the right as needed in the Emissions by Source table. If you need to provide information for more pollutants, add rows as needed.

Emissions by Source Table

| 3a) Tempo SI ID number: | | FUGI49 | | | | 3a) Tempo SI ID number: | | FUGI50 | | | | 3a) Tempo SI ID number: | | FUGI51 | | | | | | | | | |
|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|----------------------|
| 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: | | | | | | | | | | | |
| 3c) | | 3d) | | 3e) Potential | | 3f) | | 3c) | | 3d) | | 3e) Potential | | 3f) | | 3c) | | 3d) | | 3e) Potential | | 3f) | |
| Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year | Pollutant Name | CAS # | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Actual tons per year |
| PM | -- | 0.035 | 0.153 | 0.153 | | PM | -- | 0.689 | 3.017 | 3.017 | | PM | -- | 0.021 | 0.091 | 0.091 | | PM | -- | 0.021 | 0.091 | 0.091 | |
| PM ₁₀ | -- | 0.011 | 0.047 | 0.047 | | PM ₁₀ | -- | 0.326 | 1.427 | 1.427 | | PM ₁₀ | -- | 0.010 | 0.043 | 0.043 | | PM ₁₀ | -- | 0.010 | 0.043 | 0.043 | |
| PM _{2.5} | -- | 0.001 | 0.005 | 0.005 | | PM _{2.5} | -- | 0.049 | 0.216 | 0.216 | | PM _{2.5} | -- | 0.001 | 0.006 | 0.006 | | PM _{2.5} | -- | 0.001 | 0.006 | 0.006 | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | |
| VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | |
| CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | | | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | | | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | |
| Total HAPs | | | | | | Total HAPs | | | | | | Total HAPs | | | | | | | | | | | |

GI-07 Spreadsheet

Facility Emissions Summary

Air Quality Permit Program
Doc Type: Permit Application

| | |
|----------------------------|-------------------|
| 1a) AQ Facility ID number: | 13900044 |
| 2) Facility name: | Superior Minerals |

1b) Agency Interest ID number: 65

Follow the instructions to complete this spreadsheet. This spreadsheet can be copied into a tab for your emissions spreadsheet and must be submitted on a CD with your application. If you need to provide emissions information for more emissions units, add more sets of columns (3a through 3f) to the right as needed in the Emissions by Source table. If you need to provide information for more pollutants, add rows as needed.

Emissions by Source Table

| 3a) Tempo SI ID number: | | FUGIS2 | | | | 3a) Tempo SI ID number: | | FUGIS3 | | | | 3a) Tempo SI ID number: | | FUGIS4 | | | |
|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|-----|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|-----|-------------------------|-----------|-----------------------|-----------------------------|-----------------------|-----|
| 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: | | | | | | 3b) Delta ID No.: | | | | | |
| 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) | 3c) | 3d) | 3e) Potential | | | 3f) |
| | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | |
| Pollutant Name | CAS # | | | | | Pollutant Name | CAS # | | | | | Pollutant Name | CAS # | | | | |
| PM | -- | 0.710 | 1.961 | 1.961 | | PM | -- | 1.718 | 7.523 | 0.687 | | PM | -- | 0.247 | 1.084 | 0.069 | |
| PM ₁₀ | -- | 0.336 | 0.928 | 0.928 | | PM ₁₀ | -- | 0.344 | 1.505 | 0.137 | | PM ₁₀ | -- | 0.049 | 0.217 | 0.014 | |
| PM _{2.5} | -- | 0.051 | 0.140 | 0.140 | | PM _{2.5} | -- | 0.084 | 0.369 | 0.034 | | PM _{2.5} | -- | 0.012 | 0.053 | 0.003 | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | | SO ₂ | -- | -- | -- | -- | |
| NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | | NO _x | -- | -- | -- | -- | |
| VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | | VOC | -- | -- | -- | -- | |
| CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | | CO | -- | -- | -- | -- | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | | Lead | 7439-92-1 | -- | -- | -- | |
| GHGs: | | | | | | GHGs: | | | | | | GHGs: | | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | -- | -- | -- | -- | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | -- | -- | -- | -- | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | -- | -- | -- | -- | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | | CO ₂ e | -- | -- | -- | -- | |
| HAPs: | | | | | | HAPs: | | | | | | HAPs: | | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 107-02-8 | -- | -- | -- | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | | Benzene | 71-43-2 | -- | -- | -- | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 106-99-0 | -- | -- | -- | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 7782-50-5 | -- | -- | -- | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 108-90-7 | -- | -- | -- | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 67-66-3 | -- | -- | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 100-41-4 | -- | -- | -- | |
| Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1, | 107-06-2 | -- | -- | -- | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 50-00-0 | -- | -- | -- | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 118-74-1 | -- | -- | -- | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | | Hexane | 110-54-3 | -- | -- | -- | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 7647-01-0 | -- | -- | -- | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | | Methanol | 67-56-1 | -- | -- | -- | |
| Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 74-83-9 | -- | -- | -- | |
| Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 91-20-3 | -- | -- | -- | |
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | | Phenol | 108-95-2 | -- | -- | -- | |
| POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | | POM | -- | -- | -- | -- | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 75-56-9 | -- | -- | -- | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | | Styrene | 100-42-5 | -- | -- | -- | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | | Toluene | 108-88-3 | -- | -- | -- | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 75-01-4 | -- | -- | -- | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 95-47-6 | -- | -- | -- | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | -- | -- | -- | -- | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 7440-36-0 | -- | -- | -- | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 7440-38-2 | -- | -- | -- | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 7440-41-7 | -- | -- | -- | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 7440-43-9 | -- | -- | -- | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 7440-47-3 | -- | -- | -- | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 7440-48-4 | -- | -- | -- | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 7439-96-5 | -- | -- | -- | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 7439-97-6 | -- | -- | -- | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 7440-02-0 | -- | -- | -- | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7782-49-2 | -- | -- | -- | |
| | | | | | | Total HAPs | | | | | | | | | | | |

GI-07 Spreadsheet

Facility Emissions Summary

Air Quality Permit Program

Doc Type: Permit Application

1a) AQ Facility ID number: 13900044 1b) Agency Interest ID number: 65
2) Facility name: Superior Minerals

Follow the instructions to complete this spreadsheet. This spreadsheet can be copied into a tab for your emissions spreadsheet and must be submitted on a CD with your application. If you need to provide emissions information for more emissions units, add more sets of columns (3a through 3f) to the right as needed in the Emissions by Source table. If you need to provide information for more pollutants, add rows as needed.

Emissions by Source Table

| 3a) Tempo SI ID number: | | FUGI55 | | | | | | | | |
|--------------------------|--------------|-----------------------|-----------------------------|-----------------------|-----------------------------|--------------------------|--------------------|---------------------------|-----------|------------|
| 3b) Delta ID No.: | | | | | | | | | | |
| 3c)
Pollutant Name | 3d)
CAS # | 3e) Potential | | | 3f)
Actual tons per year | 4a) | 4b) | 4c) Potential (tons/year) | | 4d) Actual |
| | | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | | Pollutant Name | Potential (lbs/hr) | Unrestricted | Limited | tons/year |
| PM | -- | 0.030 | 0.133 | 0.133 | | PM | 34.568 | 148.313 | 139.448 | |
| PM ₁₀ | -- | 0.015 | 0.066 | 0.066 | | PM ₁₀ | 17.186 | 74.500 | 72.580 | |
| PM _{2.5} | -- | 0.002 | 0.010 | 0.010 | | PM _{2.5} | 8.431 | 36.707 | 36.321 | |
| SO ₂ | -- | -- | -- | -- | | SO ₂ | 0.105 | 0.459 | 0.459 | |
| NO _x | -- | -- | -- | -- | | NO _x | 12.15 | 53.22 | 53.22 | |
| VOC | -- | -- | -- | -- | | VOC | 0.378 | 1.65 | 1.65 | |
| CO | -- | -- | -- | -- | | CO | 6.16 | 26.99 | 26.99 | |
| Lead | 7439-92-1 | -- | -- | -- | | Lead | 4.58E-04 | 2.01E-03 | 2.01E-03 | |
| GHGs: | | | | | | GHGs: | | | | |
| N ₂ O (mass) | -- | -- | -- | -- | | N ₂ O (mass) | 0.075 | 0.330 | 0.330 | |
| CH ₄ (mass) | -- | -- | -- | -- | | CH ₄ (mass) | 0.437 | 1.912 | 1.912 | |
| CO ₂ (mass) | -- | -- | -- | -- | | CO ₂ (mass) | 14,143.21 | 61,947.28 | 61,947.28 | |
| CO ₂ e | -- | -- | -- | -- | | CO ₂ e | 14,176.56 | 62,093.33 | 62,093.33 | |
| HAPs: | | | | | | HAPs: | | | | |
| Acrolein | 107-02-8 | -- | -- | -- | | Acrolein | 0.00E+00 | 0.00E+00 | 0.00E+00 | |
| Benzene | 71-43-2 | -- | -- | -- | | Benzene | 1.85E-04 | 8.08E-04 | 8.08E-04 | |
| Bis (2-ethylhexyl) phth | 117-81-7 | -- | -- | -- | | Bis (2-ethylhexyl) phtha | 0.00E+00 | 0.00E+00 | 0.00E+00 | |
| 1,3-Butadiene | 106-99-0 | -- | -- | -- | | 1,3-Butadiene | 0.00E+00 | 0.00E+00 | 0.00E+00 | |
| Chlorine | 7782-50-5 | -- | -- | -- | | Chlorine | 0.00E+00 | 0.00E+00 | 0.00E+00 | |
| Chlorobenzene | 108-90-7 | -- | -- | -- | | Chlorobenzene | 0.00E+00 | 0.00E+00 | 0.00E+00 | |
| Chloroform | 67-66-3 | -- | -- | -- | | Chloroform | 0.00E+00 | 0.00E+00 | 0.00E+00 | |
| 1,4-Dichlorobenzene | 106-46-7 | -- | -- | -- | | 1,4-Dichlorobenzene | 6.35E-05 | 2.78E-04 | 2.78E-04 | |
| Ethylbenzene | 100-41-4 | -- | -- | -- | | Ethylbenzene | 2.18E-05 | 9.55E-05 | 9.55E-05 | |
| Ethylene dichloride (1,2 | 107-06-2 | -- | -- | -- | | Ethylene dichloride (1,2 | 0.00E+00 | 0.00E+00 | 0.00E+00 | |
| Formaldehyde | 50-00-0 | -- | -- | -- | | Formaldehyde | 1.53E-02 | 6.69E-02 | 6.69E-02 | |
| Hexachlorobenzene | 118-74-1 | -- | -- | -- | | Hexachlorobenzene | 0.00E+00 | 0.00E+00 | 0.00E+00 | |
| Hexane | 110-54-3 | -- | -- | -- | | Hexane | 9.53E-02 | 4.17E-01 | 4.17E-01 | |
| Hydrogen chloride | 7647-01-0 | -- | -- | -- | | Hydrogen chloride | 0.00E+00 | 0.00E+00 | 0.00E+00 | |
| Methanol | 67-56-1 | -- | -- | -- | | Methanol | 0.00E+00 | 0.00E+00 | 0.00E+00 | |
| Methyl bromide (Brom | 74-83-9 | -- | -- | -- | | Methyl bromide (Brom | 0.00E+00 | 0.00E+00 | 0.00E+00 | |
| Methyl chloride (Chlor | 74-87-3 | -- | -- | -- | | Methyl chloride (Chlor | 0.00E+00 | 0.00E+00 | 0.00E+00 | |
| Naphthalene | 91-20-3 | -- | -- | -- | | Naphthalene | 4.20E-04 | 1.84E-03 | 1.84E-03 | |

| | | | | | | | | | | |
|-----------------|-----------|----|----|----|--|-----------------|----------|----------|----------|--|
| Phenol | 108-95-2 | -- | -- | -- | | Phenol | 0.00E+00 | 0.00E+00 | 0.00E+00 | |
| POM | -- | -- | -- | -- | | POM | 4.45E-04 | 1.95E-03 | 1.95E-03 | |
| Propylene oxide | 75-56-9 | -- | -- | -- | | Propylene oxide | 0.00E+00 | 0.00E+00 | 0.00E+00 | |
| Styrene | 100-42-5 | -- | -- | -- | | Styrene | 0.00E+00 | 0.00E+00 | 0.00E+00 | |
| Toluene | 108-88-3 | -- | -- | -- | | Toluene | 2.31E-03 | 1.01E-02 | 1.01E-02 | |
| Vinyl chloride | 75-01-4 | -- | -- | -- | | Vinyl chloride | 0.00E+00 | 0.00E+00 | 0.00E+00 | |
| o-Xylene | 95-47-6 | -- | -- | -- | | o-Xylene | 3.74E-05 | 1.64E-04 | 1.64E-04 | |
| m,p-Xylene | -- | -- | -- | -- | | m,p-Xylene | 0.00E+00 | 0.00E+00 | 0.00E+00 | |
| Antimony | 7440-36-0 | -- | -- | -- | | Antimony | 0.00E+00 | 0.00E+00 | 0.00E+00 | |
| Arsenic | 7440-38-2 | -- | -- | -- | | Arsenic | 2.03E-04 | 8.87E-04 | 8.87E-04 | |
| Beryllium | 7440-41-7 | -- | -- | -- | | Beryllium | 1.45E-04 | 6.34E-04 | 6.34E-04 | |
| Cadmium | 7440-43-9 | -- | -- | -- | | Cadmium | 2.02E-04 | 8.86E-04 | 8.86E-04 | |
| Chromium | 7440-47-3 | -- | -- | -- | | Chromium | 2.18E-04 | 9.55E-04 | 9.55E-04 | |
| Cobalt | 7440-48-4 | -- | -- | -- | | Cobalt | 4.45E-06 | 1.95E-05 | 1.95E-05 | |
| Manganese | 7439-96-5 | -- | -- | -- | | Manganese | 3.08E-04 | 1.35E-03 | 1.35E-03 | |
| Mercury | 7439-97-6 | -- | -- | -- | | Mercury | 1.58E-04 | 6.91E-04 | 6.91E-04 | |
| Nickel | 7440-02-0 | -- | -- | -- | | Nickel | 2.55E-04 | 1.12E-03 | 1.12E-03 | |
| Selenium | 7782-49-2 | -- | -- | -- | | Selenium | 7.21E-04 | 3.16E-03 | 3.16E-03 | |
| | | | | | | Total HAPs | 1.16E-01 | 5.07E-01 | 5.07E-01 | |

| Process Emissions Tab | | | | Fugitives | | | | Combustion Equipment | | | | Total | | | |
|-----------------------|-----------------------|-----------------------------|-----------------------|-------------------|-----------------------|-----------------------------|-----------------------|----------------------|-----------------------|-----------------------------|-----------------------|-------------------|-----------------------|-----------------------------|-----------------------|
| | Potential | | | | Potential | | | | Potential | | | | Potential | | |
| Pollutant Name | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Pollutant Name | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Pollutant Name | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited | Pollutant Name | Pounds (lbs) per hour | tons per year un-restricted | tons per year limited |
| PM | 26.056 | 114.125 | 114.125 | PM | 6.978 | 27.471 | 18.605 | PM | 1.534 | 6.718 | 6.718 | PM | 34.568 | 148.313 | 139.448 |
| PM ₁₀ | 12.666 | 55.476 | 55.476 | PM ₁₀ | 2.986 | 12.307 | 10.387 | PM ₁₀ | 1.534 | 6.718 | 6.718 | PM ₁₀ | 17.186 | 74.500 | 72.580 |
| PM _{2.5} | 5.269 | 23.077 | 23.077 | PM _{2.5} | 1.629 | 6.912 | 6.527 | PM _{2.5} | 1.534 | 6.718 | 6.718 | PM _{2.5} | 8.431 | 36.707 | 36.321 |

| | Pounds (lbs) per hour | | | tons per year un-restricted | | | tons per year limited | | |
|-------------------------------|-----------------------|------------------|-------------------|-----------------------------|------------------|-------------------|-----------------------|------------------|-------------------|
| | PM | PM ₁₀ | PM _{2.5} | PM | PM ₁₀ | PM _{2.5} | PM | PM ₁₀ | PM _{2.5} |
| Fugitives | 6.978 | 2.986 | 1.629 | 27.471 | 12.307 | 6.912 | 18.605 | 10.387 | 6.527 |
| FUGI45 | 0.625 | 0.625 | 0.625 | 2.738 | 2.738 | 2.738 | 2.738 | 2.738 | 2.738 |
| Captured Emissions - Hopper L | 0.234 | 0.086 | 0.086 | 1.025 | 0.376 | 0.376 | 0.010 | 0.026 | 0.376 |
| FUGI46A/B | 0.606 | 0.606 | 0.606 | 2.654 | 2.654 | 2.654 | 2.654 | 2.654 | 2.654 |
| FUGI44 | 0.224 | 0.106 | 0.016 | 0.981 | 0.464 | 0.070 | 0.981 | 0.464 | 0.070 |
| FUGI51 | 0.021 | 0.010 | 0.001 | 0.091 | 0.043 | 0.006 | 0.091 | 0.043 | 0.006 |
| FUGI52A/B | 0.710 | 0.336 | 0.051 | 1.961 | 0.928 | 0.140 | 1.961 | 0.928 | 0.140 |
| FUGI47 | 0.689 | 0.081 | 0.049 | 1.071 | 0.127 | 0.077 | 1.071 | 0.127 | 0.077 |
| FUGI48 | 0.236 | 0.112 | 0.017 | 1.033 | 0.489 | 0.074 | 1.033 | 0.489 | 0.074 |
| FUGI50 | 0.689 | 0.326 | 0.049 | 3.017 | 1.427 | 0.216 | 3.017 | 1.427 | 0.216 |
| FUGI43 | 0.915 | 0.280 | 0.028 | 4.007 | 1.227 | 0.124 | 4.007 | 1.227 | 0.124 |
| FUGI49 | 0.035 | 0.011 | 0.001 | 0.153 | 0.047 | 0.005 | 0.153 | 0.047 | 0.005 |
| FUGI53 | 1.718 | 0.344 | 0.084 | 7.523 | 1.505 | 0.369 | 0.687 | 0.137 | 0.034 |
| FUGI54 | 0.247 | 0.049 | 0.012 | 1.084 | 0.217 | 0.053 | 0.069 | 0.014 | 0.003 |
| FUGI55 | 0.030 | 0.015 | 0.002 | 0.133 | 0.066 | 0.010 | 0.133 | 0.066 | 0.010 |
| | Pounds (lbs) per hour | | | tons per year un-restricted | | | tons per year limited | | |
| | PM | PM ₁₀ | PM _{2.5} | PM | PM ₁₀ | PM _{2.5} | PM | PM ₁₀ | PM _{2.5} |
| Combustion Equipment | 1.534 | 1.534 | 1.534 | 6.718 | 6.718 | 6.718 | 6.718 | 6.718 | 6.718 |
| EQUI55 | 1.131 | 1.131 | 1.131 | 4.956 | 4.956 | 4.956 | 4.956 | 4.956 | 4.956 |
| EQUI29 | 0.112 | 0.112 | 0.112 | 0.489 | 0.489 | 0.489 | 0.489 | 0.489 | 0.489 |
| EQUI6 | 0.082 | 0.082 | 0.082 | 0.359 | 0.359 | 0.359 | 0.359 | 0.359 | 0.359 |
| EQUI36 | 0.015 | 0.015 | 0.015 | 0.065 | 0.065 | 0.065 | 0.065 | 0.065 | 0.065 |
| EQUI33 | 0.067 | 0.067 | 0.067 | 0.294 | 0.294 | 0.294 | 0.294 | 0.294 | 0.294 |
| EQUI41 | 0.127 | 0.127 | 0.127 | 0.555 | 0.555 | 0.555 | 0.555 | 0.555 | 0.555 |

Superior Minerals Company
Emission Calculation Detail

| | | | | | | | | | | Uncontrolled | | | Controlled | | | |
|--|-----------------|----------------|---------------------|--|-----------------------------|-----------------------------------|------------------------|----------------------|----------------------------|-----------------------------|-------------------------------|--------------------------------|-----------------------------|-------------------------------|--------------------------------|----------------------|
| EQUI No. | SV ID No(s). | STRU No. | Filter EQUI No. New | Emission Unit Operators Description | SI Category | Controlled Emission Factor | Emission Factor Source | Max. Design Capacity | Max. Design Capacity Units | PM Emission Factor (lb/ton) | PM10 Emission Factor (lb/ton) | PM2.5 Emission Factor (lb/ton) | PM Emission Factor (lb/ton) | PM10 Emission Factor (lb/ton) | PM2.5 Emission Factor (lb/ton) | PM Emissions (lb/hr) |
| Bradley Dryer System | | | | | | | | | | | | | | | | |
| EQUI54 | -- | -- | -- | Dryer Feed Belt Conveyor B1 | Conveyor | Conveyor TP - Moisture | AP-42 Table 11.19.2-2 | 110 | tons/hr | 0.0030 | 0.0011 | 0.0011 | 0.00014 | 0.000046 | 0.000013 | 0.330 |
| EQUI80 | SV014 | STRU1 | EQUI144 | Bradley Conveyor B2 | Conveyor | Conveyor TP - Dry | AP-42 Table 11.19.2-2 | 110 | tons/hr | 0.0030 | 0.0011 | 0.0011 | -- | -- | -- | 0.330 |
| EQUI55 | SV014 | STRU1 | EQUI144 | Bradley Rotary Dryer #2 7.5x60 | Dryer/Oven | Flash Dryer w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 110 | tons/hr | 0.0268 | 0.0146 | 0.0083 | -- | -- | -- | 294.800 |
| EQUI81 | SV014 | STRU1 | EQUI144 | Bradley Dryer Cyclone B1 | Separation Equipment | Classifier w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 11 | tons/hr | 0.0225 | 0.0104 | 0.0041 | -- | -- | -- | 24.750 |
| Included with EQUI30 below under Bradley Roller Mill System | | | | | | | | | | | | | | | | |
| EQUI30 | SV027 | STRU14 | EQUI152 | Bin 20 | | | | | | | | | | | | |
| EQUI48 | SV027 | STRU14 | EQUI152 | Bin 19 CC70 | Silo/Bin | Product Storage w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 12 | tons/hr | 0.0099 | 0.0016 | 0.0006 | -- | -- | -- | 11.880 |
| EQUI57 | SV014, 16 | STRU1, 3 | EQUI144, 145 | Leg B1 Dryer Rock Elevator | Elevator | Conveyor TP - Dry | AP-42 Table 11.19.2-2 | 99 | tons/hr | 0.0030 | 0.0011 | 0.0011 | -- | -- | -- | 0.297 |
| EQUI59 | SV014 | STRU1 | EQUI144 | Raw Material Bin 26 | Silo/Bin | Conveyor TP - Dry | AP-42 Table 11.19.2-2 | 99 | tons/hr | 0.0030 | 0.0011 | 0.0011 | -- | -- | -- | 0.297 |
| EQUI73 | SV016 | STRU3 | EQUI145 | Bin 27 Raymond Mill Feed | Silo/Bin | Conveyor TP - Dry | AP-42 Table 11.19.2-2 | 99 | tons/hr | 0.0030 | 0.0011 | 0.0011 | -- | -- | -- | 0.297 |
| EQUI1 | SV014 | STRU1 | EQUI144 | Conveyor W3 Bradley Dryer to Conveyor W2 | Conveyor | Conveyor TP - Dry | AP-42 Table 11.19.2-2 | 110 | tons/hr | 0.0030 | 0.0011 | 0.0011 | -- | -- | -- | 0.330 |
| Bradley Roller Mill System | | | | | | | | | | | | | | | | |
| EQUI29 | SV014 | STRU1 | EQUI144 | Bradley Roller Mill, Air Separator | Rolling Equipment | Grinding w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 50 | tons/hr | 0.0404 | 0.0339 | 0.0121 | -- | -- | -- | 202.000 |
| EQUI87 | SV014 | STRU1 | EQUI144 | Cyclone Bradley B2 | Separation Equipment | Classifier w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 50 | tons/hr | 0.0225 | 0.0104 | 0.0041 | -- | -- | -- | 112.500 |
| Capacity addressed by cyclone B2 | | | | | | | | | | | | | | | | |
| EQUI88 | SV014 | STRU1 | EQUI144 | Cyclone Bradley B3 | Separation Equipment | Classifier w/ Fabric Filter* | | See EU100 | | | | | -- | -- | -- | |
| EQUI82 | SV014, 16 | STRU1, 3 | EQUI144, 145 | Leg B2 Bradley | Conveyor | Conveyor TP - Dry | AP-42 Table 11.19.2-2 | 50 | tons/hr | 0.0030 | 0.0011 | 0.0011 | -- | -- | -- | 0.150 |
| EQUI96 | SV014 | STRU1 | EQUI144 | Screener B1 | Screens | Fines Screening - Dry | AP-42 Table 11.19.2-2 | 50 | tons/hr | 0.3000 | 0.0720 | 0.0720 | -- | -- | -- | 15.000 |
| EQUI18 | SV008, 12, 25 | STRU12, 23, 27 | EQUI150, 156, 158 | Bin 16 CC70 | Silo/Bin | Product Storage w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 50 | tons/hr | 0.0099 | 0.0016 | 0.0006 | -- | -- | -- | 49.500 |
| EQUI63 | SV014 | STRU1 | EQUI144 | Leg 2 Bradley Ball Mill Elevator | Elevator | Conveyor TP - Dry | AP-42 Table 11.19.2-2 | 12 | tons/hr | 0.0030 | 0.0011 | 0.0011 | -- | -- | -- | 0.036 |
| Product Storage w/ Fabric Filter* | | | | | | | | | | | | | | | | |
| EQUI30 | SV027 | STRU14 | EQUI152 | Bin 20 | Silo/Bin | Product Storage w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 50 | tons/hr | 0.0099 | 0.0016 | 0.0006 | -- | -- | -- | 49.500 |
| EQUI31 | SV008, 12, 25 | STRU12, 23, 27 | EQUI150, 156, 158 | Bin 28 | Silo/Bin | Product Storage w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 50 | tons/hr | 0.0099 | 0.0016 | 0.0006 | -- | -- | -- | 49.500 |
| Williams Systems | | | | | | | | | | | | | | | | |
| Williams Hammer Mill System | | | | | | | | | | | | | | | | |
| EQUI2 | -- | -- | -- | Conveyor #1 | Conveyor | Conveyor TP - Moisture | AP-42 Table 11.19.2-2 | 50 | tons/hr | 0.0030 | 0.0011 | 0.0011 | 0.00014 | 0.000046 | 0.000013 | 0.150 |
| EQUI93 | -- | -- | -- | Rock Breaker - Stamler | Crusher | Tertiary Crusher - Moisture | AP-42 Table 11.19.2-2 | 50 | tons/hr | 0.0054 | 0.00240 | 0.00240 | 0.0012 | 0.00054 | 0.00010 | 0.270 |
| EQUI86 | SV001 | STRU16 | EQUI153 | Conveyor W2 Bradley dryer to Williams system | Conveyor | Conveyor TP - Dry | AP-42 Table 11.19.2-2 | 50 | tons/hr | 0.0030 | 0.0011 | 0.0011 | -- | -- | -- | 0.150 |
| EQUI3 | SV001 | STRU16 | EQUI153 | Williams Hammermill | Milling Equipment | Fines Crushing - Dry | AP-42 Table 11.19.2-2 | 50 | tons/hr | 0.0390 | 0.0150 | 0.0150 | -- | -- | -- | 1.950 |
| EQUI4 | SV001 | STRU16 | EQUI153 | Leg #1 14" Bucket Elevator | Elevator | Conveyor TP - Dry | AP-42 Table 11.19.2-2 | 50 | tons/hr | 0.0030 | 0.0011 | 0.0011 | -- | -- | -- | 0.150 |
| EQUI5 | SV001 | STRU16 | EQUI153 | Bin 9 Storage Silo | Silo/Bin | Conveyor TP - Dry | AP-42 Table 11.19.2-2 | 50 | tons/hr | 0.0030 | 0.0011 | 0.0011 | -- | -- | -- | 0.150 |
| Williams Roller Mill System | | | | | | | | | | | | | | | | |
| EQUI6 | SV001 | STRU16 | EQUI153 | Williams Roller Mill | Milling Equipment | Grinding w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 50 | tons/hr | 0.0404 | 0.0339 | 0.0121 | -- | -- | -- | 202.000 |
| EQUI104 | SV001 | STRU16 | EQUI153 | Classifier W-1 Williams | Separation Equipment | Classifier w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 30 | tons/hr | 0.0225 | 0.0104 | 0.0041 | -- | -- | -- | 67.500 |
| Williams Roller Mill - Powders | | | | | | | | | | | | | | | | |
| EQUI90 | SV001, 003 | STRU16, 18 | EQUI153, 155 | Cyclone Williams (#1) | Separation Equipment | Classifier w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 25 | tons/hr | 0.0225 | 0.0104 | 0.0041 | -- | -- | -- | 56.250 |
| EQUI10 | SV001 | STRU16 | EQUI153 | Screen #2 Fines Screen | Screens | Fines Screening - Dry | AP-42 Table 11.19.2-2 | 50 | tons/hr | 0.3000 | 0.0720 | 0.0720 | -- | -- | -- | 15.000 |
| Product Storage w/ Fabric Filter* | | | | | | | | | | | | | | | | |
| EQUI11 | SV008, 12, 25 | STRU12, 23, 27 | EQUI150, 156, 158 | Bin 15 CC70 | Silo/Bin | Product Storage w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 50 | tons/hr | 0.0099 | 0.0016 | 0.0006 | -- | -- | -- | 49.500 |
| Included with EQUI18 above under Bradley Roller Mill System | | | | | | | | | | | | | | | | |
| EQUI18 | SV008, 12, 25 | STRU12, 23, 27 | EQUI150, 156, 158 | Bin 16 CC70 | | | | | | | | | | | | |
| Product Storage w/ Fabric Filter* | | | | | | | | | | | | | | | | |
| EQUI106 | SV027 | STRU14 | EQUI152 | Bin 4 CC70 | Silo/Bin | Product Storage w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 50 | tons/hr | 0.0099 | 0.0016 | 0.0006 | -- | -- | -- | 49.500 |
| Included with EQUI48 above under Bradley Dryer System | | | | | | | | | | | | | | | | |
| EQUI48 | SV027 | STRU14 | EQUI152 | Bin 19 CC70 | | | | | | | | | | | | |
| Product Storage w/ Fabric Filter* | | | | | | | | | | | | | | | | |
| EQUI75 | SV008, 12, 25 | STRU12, 23, 27 | EQUI150, 156, 158 | Bin 31 CC70 | Silo/Bin | Product Storage w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 50 | tons/hr | 0.0099 | 0.0016 | 0.0006 | -- | -- | -- | 49.500 |
| EQUI76 | SV008, 12, 25 | STRU12, 23, 27 | EQUI150, 156, 158 | Bin 32 CC70 | Silo/Bin | Product Storage w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 50 | tons/hr | 0.0099 | 0.0016 | 0.0006 | -- | -- | -- | 49.500 |
| Williams Roller Mill - Powders - Ultrafines System | | | | | | | | | | | | | | | | |
| EQUI92 | SV002 | STRU17 | EQUI154 | Leg #8 - Ultrafine Feed | Conveyor | Conveyor TP - Dry | AP-42 Table 11.19.2-2 | 25 | tons/hr | 0.0030 | 0.0011 | 0.0011 | -- | -- | -- | 0.075 |
| EQUI36 | SV017 | STRU4 | EQUI146 | Ultrafine Classifier | Separation Equipment | Classifier w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 25 | tons/hr | 0.0225 | 0.0104 | 0.0041 | -- | -- | -- | 56.250 |
| EQUI100 | SV017 | STRU4 | EQUI146 | Ultrafines Cyclone - Cyclone #2 | Separation Equipment | Classifier w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 3 | tons/hr | 0.0225 | 0.0104 | 0.0041 | -- | -- | -- | 6.750 |
| EQUI64 | SV019 | STRU6 | EQUI147 | Bin 22 | Loading-Unloading Equipment | Product Storage w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 3 | tons/hr | 0.0099 | 0.0016 | 0.0006 | -- | -- | -- | 2.970 |
| Product Storage w/ Fabric Filter* | | | | | | | | | | | | | | | | |
| EQUI77 | SV026 | STRU13 | EQUI151 | Bin 25 Warehouse Ultrafines | Silo/Bin | Product Storage w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 3 | tons/hr | 0.0099 | 0.0016 | 0.0006 | -- | -- | -- | 2.970 |
| Williams Roller Mill - Granulars | | | | | | | | | | | | | | | | |
| EQUI7 | SV001, 002, 003 | STRU16, 17, 18 | EQUI153, 154, 155 | Leg #2 Bucket Elevator | Elevator | Conveyor TP - Dry | AP-42 Table 11.19.2-2 | 30 | tons/hr | 0.0030 | 0.0011 | 0.0011 | -- | -- | -- | 0.090 |
| EQUI9 | SV002 | STRU17 | EQUI154 | Screen #1 Coarse Screen | Screens | Fines Screening - Dry | AP-42 Table 11.19.2-2 | 30 | tons/hr | 0.3000 | 0.0720 | 0.0720 | -- | -- | -- | 9.000 |
| Included with EQUI12 below under Blending and Loading System | | | | | | | | | | | | | | | | |
| EQUI12 | SV002 | STRU17 | EQUI154 | Bin 6 CC20 | | | | | | | | | | | | |
| Included with EQUI13 below under Blending and Loading System | | | | | | | | | | | | | | | | |
| EQUI13 | SV002 | STRU17 | EQUI154 | Bin 7 CC30 | | | | | | | | | | | | |
| Included with EQUI15 below under Blending and Loading System | | | | | | | | | | | | | | | | |
| EQUI15 | SV002 | STRU17 | EQUI154 | Bin 12 CC10 | | | | | | | | | | | | |
| Williams Roller Mill - Granulars - Roll Crusher System | | | | | | | | | | | | | | | | |
| EQUI94 | SV002 | STRU17 | EQUI154 | Roll Crusher | Crusher | Grinding w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 30 | tons/hr | 0.0404 | 0.0339 | 0.0121 | -- | -- | -- | 121.200 |
| EQUI8 | SV002 | STRU17 | EQUI154 | Leg #3 Bucket Elevator | Elevator | Conveyor TP - Dry | AP-42 Table 11.19.2-2 | 30 | tons/hr | 0.0030 | 0.0011 | 0.0011 | -- | -- | -- | 0.090 |

| Williams Roller Mill - Granulars - M Screener System | | | | Leg# 7 Elevator | Elevator | Conveyor TP - Dry | AP-42 Table 11.19.2-2 | 30 tons/hr | 0.0030 | 0.0011 | 0.0011 | -- | -- | -- | 0.090 |
|--|------------|------------|------------------|--|---|-----------------------------------|-----------------------|--------------|--------|--------|--------|----|----|----|---------|
| EQUI60 | SV002 | STRU17 | EQUI153, EQUI154 | Screener # 3 - M Screener | Screener | Fines Screening - Dry | AP-42 Table 11.19.2-2 | 30 tons/hr | 0.3000 | 0.0720 | 0.0720 | -- | -- | -- | 9.000 |
| EQUI95 | SV001, 002 | STRU16, 17 | 154 | | | | | | | | | | | | |
| EQUI14 | SV002 | STRU17 | EQUI154 | | | | | Bin 8 CC40 | | | | | | | |
| EQUI61 | SV002 | STRU17 | EQUI154 | Bin 18 CC50 | Note: Bins8/18 are in parallel. | | | | | | | | | | |
| Raymond Roller Mill | | | | | | | | | | | | | | | |
| EQUI33 | SV016 | STRU3 | EQUI145 | Raymond Roller Mill | Milling Equipment | Grinding w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 25 tons/hr | 0.0404 | 0.0339 | 0.0121 | -- | -- | -- | 101.000 |
| EQUI159 | SV016 | STRU3 | EQUI145 | Classifier R-1 Raymond Mill | Milling Equipment | Classifier w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 25 tons/hr | 0.0225 | 0.0104 | 0.0041 | -- | -- | -- | 56.250 |
| EQUI89 | SV016 | STRU3 | EQUI145 | Cyclone Raymond R1 | Separation Equipment | Classifier w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 25 tons/hr | 0.0225 | 0.0104 | 0.0041 | -- | -- | -- | 56.250 |
| EQUI30 | SV027 | STRU14 | EQUI152 | Bin 20 | Included with EQUI30 above under Bradley Roller Mill System | | | | | | | | | | |
| EQUI48 | SV027 | STRU14 | EQUI152 | Bin 19 CC70 | Included with EQUI48 above under Bradley Dryer System | | | | | | | | | | |
| EQUI50 | SV027 | STRU14 | EQUI152 | Bin 21 | Silo/Bin | Product Storage w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 25 tons/hr | 0.0099 | 0.0016 | 0.0006 | -- | -- | -- | 24.750 |
| EQUI71 | SV027 | STRU14 | EQUI152 | Bin 24 | Silo/Bin | Product Storage w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 25 tons/hr | 0.0099 | 0.0016 | 0.0006 | -- | -- | -- | 24.750 |
| Transporters | | | | | | | | | | | | | | | |
| EQUI97 | SV027 | STRU14 | EQUI152 | Transporter Bin 15 to Bin 4 | Silo/Bin | Product Storage w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 0 tons/hr | 0.0099 | 0.0016 | 0.0006 | -- | -- | -- | 0.000 |
| EQUI98 | SV027 | STRU14 | EQUI152 | Transporter Bin 16/28 to Bin 19/20 | Silo/Bin | Product Storage w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 40 tons/hr | 0.0099 | 0.0016 | 0.0006 | -- | -- | -- | 39.600 |
| EQUI99 | SV011, 027 | STRU14, 26 | 157 | Transporter Bin 31/32 to Bin 19/10 | Silo/Bin | Product Storage w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 40 tons/hr | 0.0099 | 0.0016 | 0.0006 | -- | -- | -- | 39.600 |
| EQUI91 | SV012 | STRU27 | EQUI158 | Dust system Transporter to Bin 20, D5-12 | Silo/Bin | Product Storage w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 0.75 tons/hr | 0.0099 | 0.0016 | 0.0006 | -- | -- | -- | 0.742 |
| Blending and Loading System | | | | | | | | | | | | | | | |
| EQUI12 | SV002 | STRU17 | EQUI154 | Bin 6 CC20 | Silo/Bin | Product Storage w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 40 tons/hr | 0.0099 | 0.0016 | 0.0006 | -- | -- | -- | 39.600 |
| EQUI13 | SV002 | STRU17 | EQUI154 | Bin 7 CC30 | Silo/Bin | Product Storage w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 40 tons/hr | 0.0099 | 0.0016 | 0.0006 | -- | -- | -- | 39.600 |
| EQUI15 | SV002 | STRU17 | EQUI154 | Bin 12 CC10 | Silo/Bin | Product Storage w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 40 tons/hr | 0.0099 | 0.0016 | 0.0006 | -- | -- | -- | 39.600 |
| EQUI14 | SV002 | STRU17 | EQUI154 | Bin 8 CC40 | Silo/Bin | Product Storage w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 40 tons/hr | 0.0099 | 0.0016 | 0.0006 | -- | -- | -- | 39.600 |
| EQUI61 | SV002 | STRU17 | EQUI154 | Bin 18 CC50 | Note: Bins8/18 are in parallel. | | | | | | | | | | |
| EQUI24 | SV002 | STRU17 | EQUI154 | Leg #4 Bucket Elevator | Conveyor | Conveyor TP - Dry | AP-42 Table 11.19.2-2 | 75 tons/hr | 0.0030 | 0.0011 | 0.0011 | -- | -- | -- | 0.225 |
| EQUI25 | SV002 | STRU17 | EQUI154 | Bin 1 CC20 | Silo/Bin | Product Storage w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 75 tons/hr | 0.0099 | 0.0016 | 0.0006 | -- | -- | -- | 74.250 |
| EQUI26 | SV002 | STRU17 | EQUI154 | Bin 2 Shell & Bone | Note: In parallel with Bin 1, 3, 13, 14, 23, 4 | | | | | | | | | | |
| EQUI105 | SV002 | STRU17 | EQUI154 | Bin 3 CC45 | Note: In parallel with Bin 1, 2, 13, 14, 23, 4 | | | | | | | | | | |
| EQUI107 | SV002 | STRU17 | EQUI154 | Bin 13 Free Flow | Note: In parallel with Bin 1, 2, 3, 14, 23, 4 | | | | | | | | | | |
| EQUI110 | SV002 | STRU17 | EQUI154 | Bin 14 Free Flow | Note: In parallel with Bin 1, 2, 3, 13, 23, 4 | | | | | | | | | | |
| EQUI72 | SV027 | STRU14 | EQUI152 | Bin 23 | Note: In parallel with Bin 1, 2, 3, 13, 14, 4 | | | | | | | | | | |
| EQUI23 | SV005 | STRU20 | -- | Bin 5 Warehouse bagger-transfer bin (Bin 5 Removed) | | Product Storage w/ Fabric Filter* | Removed | | | | | | | | |
| EQUI106 | SV027 | STRU14 | EQUI152 | Bin 4 CC70 | Note: In parallel with Bin 1, 2, 3, 13, 14, 23 | | | | | | | | | | |
| EQUI102 | SV002 | STRU17 | EQUI154 | Closed Top Loadout system** | Loading-Unloading Equipment | Product Loading, enclosed truck | AP-42 Table 11.17-4 | 78 tons/hr | 0.6100 | 0.6100 | 0.6100 | -- | -- | -- | 47.580 |
| EQUI160 | SV027 | STRU14 | EQUI152 | Bin 34 | Silo/Bin | Product Storage w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 5 tons/hr | 0.0099 | 0.0016 | 0.0006 | -- | -- | -- | 4.521 |
| Warehouse System | | | | | | | | | | | | | | | |
| EQUI21 | SV005 | STRU20 | -- | Bin 5 Warehouse bagger-transfer bin (Bin 5 Removed) | | Product Storage w/ Fabric Filter* | Removed | | | | | | | | |
| EQUI74 | SV022 | STRU9 | EQUI148 | Bin 29 Warehouse bagger bin | Silo/Bin | Product Storage w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 8 tons/hr | 0.0099 | 0.0016 | 0.0006 | -- | -- | -- | 7.920 |
| EQUI77 | SV026 | STRU13 | EQUI151 | Bin 25 Warehouse Ultrafines | Included with EQUI77 above under Williams Roller Mill - Powders - Ultrafines System | | | | | | | | | | |
| EQUI22 | SV022 | STRU9 | -- | Packer 1 Warehouse bag filler (Removed) | | Product Storage w/ Fabric Filter* | Removed | | | | | | | | |
| EQUI23 | SV022 | STRU9 | -- | Packer 2 Warehouse bag filler (Removed) | | Product Storage w/ Fabric Filter* | Removed | | | | | | | | |
| EQUI68 | SV022 | STRU9 | -- | Packer 3 Warehouse bag filler Ultrafines (Removed) | | Product Storage w/ Fabric Filter* | Removed | | | | | | | | |
| EQUI34 | SV005, 022 | STRU9, 20 | -- | Bagger Loading System - Transfer From Bin 5 (Bin 5 Removed) | | Product Storage w/ Fabric Filter* | Removed | | | | | | | | |
| EQUI126 | SV022 | STRU9 | EQUI148 | Bin 33 for Super Sack Filling Station | Filling Operations Equipment | Product Storage w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 6 tons/hr | 0.0099 | 0.0016 | 0.0006 | -- | -- | -- | 5.940 |
| EQUI127 | SV022 | STRU9 | EQUI148 | Super Sack Filling Station | Filling Operations Equipment | Product Storage w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 6 tons/hr | 0.0099 | 0.0016 | 0.0006 | -- | -- | -- | 5.940 |
| Marcy System | | | | | | | | | | | | | | | |
| EQUI16 | SV010 | STRU25 | -- | Belt Conveyor #2 Marcy feed (Marcy Mill Removed) | | Conveyor TP - Moisture | Removed | | | | | | | | |
| EQUI52 | SV010 | STRU25 | -- | 5' x 20'-5" MMBtu Rotary Dryer Marcy System (Marcy Mill Removed) | | Flash Dryer w/ Fabric Filter* | Removed | | | | | | | | |
| EQUI52 | SV010 | STRU25 | -- | 5' x 20'-5" MMBtu Rotary Dryer Marcy System (comb.) (Marcy Mill Removed) | | Combustion | Removed | | | | | | | | |
| EQUI84 | SV010 | STRU25 | -- | Leg #6 Marcy Dryer to Bin 17 (Marcy Mill Removed) | | Conveyor TP - Dry | Removed | | | | | | | | |
| EQUI78 | SV010 | STRU25 | -- | Bin 17 - Raw Material (Marcy Mill Removed) | | Conveyor TP - Dry | Removed | | | | | | | | |
| EQUI19 | SV006 | STRU23 | -- | Marcy Ball Mill (Marcy Mill Removed) | | Grinding w/ Fabric Filter* | Removed | | | | | | | | |

| | | | | | | | | | | | | | | | | | | |
|-----------------------------|------------|-----------|--------------|--|-----------------------------|--------------------------------------|--|-------|---------|---------|---------|---------|---------|----------|----------|--------|---------|--|
| EQUI20 | SV006 | STRU23 | -- | Leg-#5-Bucket-Elevator-(Marcy-Mill-Removed) | | Conveyor-TP-Dry | Removed | | | | | | | | | | | |
| EQUI47 | SV006 | STRU23 | -- | Mechanical-Air-Separator-Marcy-system-(Marcy-Mill-Removed) | | Classifier-w/Fabric-Filter* | Removed | | | | | | | | | | | |
| EQUI108 | SV011 | STRU26 | EQUI157 | Bin 10 CC70 | Silo/Bin | Product Storage w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 30 | tons/hr | 0.0099 | 0.0016 | 0.0006 | -- | -- | -- | -- | 29.700 | |
| EQUI109 | SV011 | STRU26 | EQUI157 | Bin 11 | Silo/Bin | Product Storage w/ Fabric Filter* | AP-42 Table 11.19.2-4 | 30 | tons/hr | 0.0099 | 0.0016 | 0.0006 | -- | -- | -- | -- | 29.700 | |
| Lehigh System | | | | | | | | | | | | | | | | | | |
| EQUI101 | SV019, 026 | STRU6, 13 | EQUI147, 151 | Conveyor L1 - Lehigh hopper to dryer | Conveyor | Conveyor TP - Dry | AP-42 Table 11.19.2-2 | 12 | tons/hr | 0.0030 | 0.0011 | 0.0006 | -- | -- | -- | -- | 0.036 | |
| EQUI41 | SV023 | STRU10 | EQUI149 | Lehigh Dryer | Other Emission Unit | Flash Dryer w/Fabric Filter* | AP-42 Table 11.19.2-4 | 12 | tons/hr | 0.0268 | 0.0146 | 0.0083 | -- | -- | -- | -- | 32.160 | |
| EQUI103 | -- | -- | -- | Conveyor L2 | Conveyor | Conveyor TP - Dry | AP-42 Table 11.19.2-2 | 12 | tons/hr | 0.0030 | 0.0011 | 0.0011 | 0.00014 | 0.000046 | 0.000013 | 0.036 | | |
| EQUI42 | SV023 | STRU10 | EQUI149 | Leg L#1 Dryer Discharge Bucket Elevator | Elevator | Conveyor TP - Dry | AP-42 Table 11.19.2-2 | 12 | tons/hr | 0.0030 | 0.0011 | 0.0011 | -- | -- | -- | -- | 0.036 | |
| Dock | | | | | | | | | | | | | | | | | | |
| EQUI113 | -- | -- | -- | Dock-Short-Belt-Conveyor- | Conveyor | Conveyor-TP-Moisture | AP-42 Table 11.19.2-2 | 0 | tons/hr | 0.0030 | 0.0011 | 0.0011 | 0.00014 | 0.000046 | 0.000013 | 0.000 | | |
| EQUI114 | -- | -- | -- | Dock-Radial-Stacker-Belt-conveyor | Material-Handling-Equipment | Conveyor-TP-Moisture | AP-42 Table 11.19.2-2 | 0 | tons/hr | 0.0030 | 0.0011 | 0.0011 | 0.00014 | 0.000046 | 0.000013 | 0.000 | | |
| EQUI115 | -- | -- | -- | Dock-Truck-Hopper | Hopper | Conveyor-TP-Moisture | AP-42 Table 11.19.2-2 | 0 | tons/hr | 0.0030 | 0.0011 | 0.0011 | 0.00014 | 0.000046 | 0.000013 | 0.000 | | |
| EQUI153 | -- | -- | -- | Dock-Target Hopper | Hopper | Conveyor TP, Moisture | AP-42 Table 11.19.2-2 | 313 | tons/hr | 0.0030 | 0.0011 | 0.0011 | 0.00014 | 0.000046 | 0.000013 | 0.938 | | |
| EQUI116 | -- | -- | -- | Limestone Conveyor 1 | Conveyor | Conveyor TP, Moisture | AP-42 Table 11.19.2-2 | 313 | tons/hr | 0.0030 | 0.0011 | 0.0011 | 0.00014 | 0.000046 | 0.000013 | 0.938 | | |
| EQUI117 | -- | -- | -- | Limestone Conveyor 2 | Conveyor | Conveyor-TP-Moisture | AP-42 Table 11.19.2-2 | 0 | tons/hr | 0.0030 | 0.0011 | 0.0011 | 0.00014 | 0.000046 | 0.000013 | 0.000 | | |
| EQUI118 | -- | -- | -- | Limestone Conveyor 3 | Conveyor | Conveyor TP, Moisture | AP-42 Table 11.19.2-2 | 313 | tons/hr | 0.0030 | 0.0011 | 0.0011 | 0.00014 | 0.000046 | 0.000013 | 0.938 | | |
| EQUI119 | -- | -- | -- | Limestone Conveyor 4 | Conveyor | Conveyor TP, Moisture | AP-42 Table 11.19.2-2 | 313 | tons/hr | 0.0030 | 0.0011 | 0.0011 | 0.00014 | 0.000046 | 0.000013 | 0.938 | | |
| EQUI120 | -- | -- | -- | Limestone Conveyor 5 | Conveyor | Conveyor TP, Moisture | AP-42 Table 11.19.2-2 | 313 | tons/hr | 0.0030 | 0.0011 | 0.0011 | 0.00014 | 0.000046 | 0.000013 | 0.938 | | |
| EQUI121 | -- | -- | -- | Limestone Conveyor 6 | Conveyor | Conveyor TP, Moisture | AP-42 Table 11.19.2-2 | 313 | tons/hr | 0.0030 | 0.0011 | 0.0011 | 0.00014 | 0.000046 | 0.000013 | 0.938 | | |
| EQUI122 | -- | -- | -- | Limestone Conveyor 7 | Conveyor | Conveyor TP, Moisture | AP-42 Table 11.19.2-2 | 313 | tons/hr | 0.0030 | 0.0011 | 0.0011 | 0.00014 | 0.000046 | 0.000013 | 0.938 | | |
| EQUI123 | -- | -- | -- | Limestone Conveyor 8 | Conveyor | Conveyor TP, Moisture | AP-42 Table 11.19.2-2 | 313 | tons/hr | 0.0030 | 0.0011 | 0.0011 | 0.00014 | 0.000046 | 0.000013 | 0.938 | | |
| EQUI124 | -- | -- | -- | Limestone Conveyor 9 | Conveyor | Conveyor TP, Moisture | AP-42 Table 11.19.2-2 | 313 | tons/hr | 0.0030 | 0.0011 | 0.0011 | 0.00014 | 0.000046 | 0.000013 | 0.938 | | |
| EQUI125 | -- | -- | -- | Limestone Conveyor 10 | Conveyor | Conveyor TP, Moisture | AP-42 Table 11.19.2-2 | 313 | tons/hr | 0.0030 | 0.0011 | 0.0011 | 0.00014 | 0.000046 | 0.000013 | 0.938 | | |
| Triple-Deck Screener | | | | | | | | | | | | | | | | | | |
| EQUI128 | -- | -- | -- | Triple-Deck Screener | Screener | Screening, Moisture | AP-42 Table 11.19.2-2 | 400 | tons/hr | 0.0250 | 0.0087 | 0.0087 | 0.0022 | 0.0007 | 0.0007 | 10.000 | | |
| EQUI129 | -- | -- | -- | Screening Conveyor 1 | Conveyor | Conveyor TP, Moisture | AP-42 Table 11.19.2-2 | 400 | tons/hr | 0.0030 | 0.0011 | 0.0011 | 0.00014 | 0.000046 | 0.000013 | 1.200 | | |
| EQUI130 | -- | -- | -- | Screening Conveyor 2 | Conveyor | Conveyor TP, Moisture | AP-42 Table 11.19.2-2 | 400 | tons/hr | 0.0030 | 0.0011 | 0.0011 | 0.00014 | 0.000046 | 0.000013 | 1.200 | | |
| EQUI140 | -- | -- | -- | Railcar-Loadout-(Removed) | | Truck-Loading-Conveyor-Crushed-Stone | Removed | | | | | | | | | | | |
| Pet Coke Handling | | | | | | | | | | | | | | | | | | |
| EQUI131 | | | | Pet Coke Unloading to Conveyor 1 | Conveyor | | AP-42 Table 13.2.4-3, moisture = 5.25%, max wind speed = 9.8 mph | 500 | tons/hr | 0.00146 | 0.00069 | 0.00010 | -- | -- | -- | -- | 0.732 | |
| EQUI132 | | | | Pet Coke Conveyor 1 Transfer Point to Stacker | Conveyor | | AP-42 Table 13.2.4-3 | 500 | tons/hr | 0.00146 | 0.00069 | 0.00010 | -- | -- | -- | -- | 0.732 | |
| EQUI133 | | | | Pet Coke Stacker Conveyor Transfer Point 2 | Conveyor | | AP-42 Table 13.2.4-3 | 500 | tons/hr | 0.00059 | 0.00028 | 0.00004 | -- | -- | -- | -- | 0.297 | |
| EQUI135 | | | | Pet Coke Front End Loader to Hopper Conveyor System | Conveyor | | AP-42 Table 13.2.4-3 | 500 | tons/hr | 0.00059 | 0.00028 | 0.00004 | -- | -- | -- | -- | 0.297 | |
| EQUI134 | | | | Pet Coke Conveyor Transfer Point 3 | Conveyor | | AP-42 Table 13.2.4-3 | 313 | tons/hr | 0.00146 | 0.00069 | 0.00010 | -- | -- | -- | -- | 0.458 | |
| EQUI143 | | | | Pet Coke Barge Loading | Conveyor | | AP-42 Table 13.2.4-3 | 313 | tons/hr | 0.00146 | 0.00069 | 0.00010 | -- | -- | -- | -- | 0.458 | |
| Separation Equipment | | | | | | | | | | | | | | | | | | |
| EQUI144 | | STRU1 | | Dryer Dust System Vent | Separation Equipment | | | 20000 | acfm | | | | | | | | 650.266 | |
| EQUI145 | | STRU3 | | Raymond Mill Dust System | Separation Equipment | | | 16000 | acfm | | | | | | | | 214.021 | |
| EQUI146 | | STRU4 | | DL60 Powder Loading | Separation Equipment | | | 2300 | acfm | | | | | | | | 63.000 | |
| | | STRU5 | | Dust-System-#18 | Separation-Equipment | Not active | | 2182 | acfm | | | | | | | | -- | |
| EQUI147 | | STRU6 | | Ultrafine Bin Vent System | Separation Equipment | | | 500 | acfm | | | | | | | | 2.988 | |
| EQUI148 | | STRU9 | | Dust System #22 | Separation Equipment | | | 7069 | acfm | | | | | | | | 19.800 | |
| EQUI149 | | STRU10 | | Lehigh Slag Dryer System | Separation Equipment | | | 19635 | acfm | | | | | | | | 32.196 | |
| EQUI150 | | STRU12 | | Dust System #25 | Separation Equipment | | | 785 | acfm | | | | | | | | 82.500 | |
| EQUI151 | | STRU13 | | Bin 25 Dust System | Separation Equipment | | | 700 | acfm | | | | | | | | 2.988 | |
| EQUI152 | | STRU14 | | Bin 20 Dust System | Separation Equipment | | | 12000 | acfm | | | | | | | | 224.301 | |
| EQUI153 | | STRU16 | | Williams Mill Dust System | Separation Equipment | | | 12000 | acfm | | | | | | | | 319.555 | |
| EQUI154 | | STRU17 | | Dust System #2 | Separation Equipment | | | 10000 | acfm | | | | | | | | 415.440 | |
| EQUI155 | | STRU18 | | Dust System #3 | Separation Equipment | | | 12566 | acfm | | | | | | | | 28.155 | |
| EQUI167 | | STRU20 | | Bin-5-Dust-System | Separation-Equipment | Removed | | | | | | | | | | | -- | |
| | | STRU21 | | Bail-Mill-Dust-System | Separation-Equipment | Removed | | | | | | | | | | | -- | |
| | | STRU22 | | Dust-System-#7 | Separation-Equipment | Removed | | | | | | | | | | | -- | |
| EQUI156 | | STRU23 | | Dust System #8 | Separation Equipment | | | 785 | acfm | | | | | | | | 82.500 | |
| | | STRU25 | | Dust-System-#10 | Separation-Equipment | Removed | | | | | | | | | | | -- | |
| EQUI157 | | STRU26 | | Dust System #11 | Separation Equipment | | | 700 | acfm | | | | | | | | 79.200 | |
| EQUI158 | | STRU27 | | Bradley Dolomite Circuit | Separation Equipment | | | 8727 | acfm | | | | | | | | 83.242 | |
| | | STRU28 | | Dust-System-#13 | Separation-Equipment | Removed | | | | | | | | | | | -- | |

Uncontr
PM
Emissions
(lb/hr)

All EQUIS: 2325.688
All EQUIS vented through STRU5: 2300.152

| Uncontrolled | | | | | Controlled | | | | | | | IPER
Concentration
in Airflow
(gr/dscf) | IPER
Concentration
in Airflow
(lb/hr) | IPER Process
Weight
Method
(lb/hr) | Meets Process
Equip Rule?
(Y/N) |
|------------------------------|-------------------------------|------------------------------|--------------------------------|---------------------------------|------------------------------|----------------------------|------------------------------|-------------------------------|-----------------------------|-------------------------------|--------------------------------|--|--|---|---------------------------------------|
| PM10
Emissions
(lb/hr) | PM2.5
Emissions
(lb/hr) | PM
Emissions
(tons/yr) | PM10
Emissions
(tons/yr) | PM2.5
Emissions
(tons/yr) | Control
Efficiency
(%) | PM
Emissions
(lb/hr) | PM10
Emissions
(lb/hr) | PM2.5
Emissions
(lb/hr) | PM
Emissions
(ton/yr) | PM10
Emissions
(ton/yr) | PM2.5
Emissions
(ton/yr) | | | | |
| 0.121 | 0.121 | 1.445 | 0.530 | 0.530 | -- | 0.015 | 0.005 | 0.001 | 0.067 | 0.022 | 0.006 | | | 12.35 | Yes |
| 0.121 | 0.121 | 1.445 | 0.530 | 0.530 | -- | 0.003 | 0.001 | 0.001 | 0.014 | 0.005 | 0.005 | | | 12.35 | Yes |
| 22.943 | 13.043 | 1291.224 | 100.490 | 57.128 | 99% / 99% | 2.948 | 1.606 | 0.913 | 12.912 | 7.034 | 3.999 | | | 28.58 | Yes |
| 1.634 | 0.644 | 108.405 | 7.158 | 2.822 | 99% / 99% | 0.248 | 0.114 | 0.045 | 1.084 | 0.501 | 0.198 | | | 4.87 | Yes |
| | | | | | | | | | | | | | | | |
| 0.274 | 0.103 | 52.034 | 1.201 | 0.451 | 99% / 99% | 0.119 | 0.019 | 0.007 | 0.520 | 0.084 | 0.032 | | | 1.61 | Yes |
| 0.109 | 0.109 | 1.301 | 0.477 | 0.477 | -- | 0.003 | 0.001 | 0.001 | 0.013 | 0.005 | 0.005 | | | 12.14 | Yes |
| 0.109 | 0.109 | 1.301 | 0.477 | 0.477 | -- | 0.003 | 0.001 | 0.001 | 0.013 | 0.005 | 0.005 | | | 12.14 | Yes |
| 0.109 | 0.109 | 1.301 | 0.477 | 0.477 | -- | 0.003 | 0.001 | 0.001 | 0.013 | 0.005 | 0.005 | | | 12.14 | Yes |
| 0.121 | 0.121 | 1.445 | 0.530 | 0.530 | -- | 0.003 | 0.001 | 0.001 | 0.014 | 0.005 | 0.005 | | | 12.35 | Yes |
| | | | | | | | | | | | | | | | |
| 24.214 | 8.643 | 884.760 | 106.059 | 37.856 | 99% / 99% | 2.020 | 1.695 | 0.605 | 8.848 | 7.424 | 2.650 | | | 28.82 | Yes |
| 7.429 | 2.929 | 492.750 | 32.537 | 12.827 | 99% / 99% | 1.125 | 0.520 | 0.205 | 4.928 | 2.278 | 0.898 | | | 23.86 | Yes |
| | | | | | | | | | | | | | | 0.00 | Yes |
| 0.055 | 0.055 | 0.657 | 0.241 | 0.241 | -- | 0.002 | 0.001 | 0.001 | 0.007 | 0.002 | 0.002 | | | 10.88 | Yes |
| 3.600 | 3.600 | 65.700 | 15.768 | 15.768 | -- | 0.150 | 0.036 | 0.036 | 0.657 | 0.158 | 0.158 | | | 21.25 | Yes |
| 1.143 | 0.429 | 216.810 | 5.006 | 1.877 | 99% / 99% | 0.005 | 0.001 | 0.000 | 0.022 | 0.004 | 0.001 | | | 17.68 | Yes |
| 0.013 | 0.013 | 0.158 | 0.058 | 0.058 | -- | 0.000 | 0.000 | 0.000 | 0.002 | 0.001 | 0.001 | | | 0.25 | Yes |
| 8.000 | 3.000 | 216.810 | 35.040 | 13.140 | 99% / 99% | 0.005 | 0.001 | 0.000 | 0.022 | 0.004 | 0.001 | | | 24.14 | Yes |
| 1.143 | 0.429 | 216.810 | 5.006 | 1.877 | 99% / 99% | 0.005 | 0.001 | 0.000 | 0.022 | 0.004 | 0.001 | | | 17.68 | Yes |
| | | | | | | | | | | | | | | | |
| 0.055 | 0.055 | 0.657 | 0.241 | 0.241 | -- | 0.007 | 0.002 | 0.001 | 0.031 | 0.010 | 0.003 | | | 10.88 | Yes |
| 0.120 | 0.120 | 1.183 | 0.526 | 0.526 | -- | 0.060 | 0.027 | 0.005 | 0.263 | 0.118 | 0.022 | | | 12.33 | Yes |
| 0.055 | 0.055 | 0.657 | 0.241 | 0.241 | -- | 0.002 | 0.001 | 0.001 | 0.007 | 0.002 | 0.002 | | | 10.88 | Yes |
| 0.750 | 0.750 | 8.541 | 3.285 | 3.285 | -- | 0.020 | 0.008 | 0.008 | 0.085 | 0.033 | 0.033 | | | 16.53 | Yes |
| 0.055 | 0.055 | 0.657 | 0.241 | 0.241 | -- | 0.002 | 0.001 | 0.001 | 0.007 | 0.002 | 0.002 | | | 10.88 | Yes |
| 0.055 | 0.055 | 0.657 | 0.241 | 0.241 | -- | 0.002 | 0.001 | 0.001 | 0.007 | 0.002 | 0.002 | | | 10.88 | Yes |
| | | | | | | | | | | | | | | | |
| 24.214 | 8.643 | 884.760 | 106.059 | 37.856 | 99% / 99% | 2.020 | 1.695 | 0.605 | 8.848 | 7.424 | 2.650 | | | 28.82 | Yes |
| 4.457 | 1.757 | 295.650 | 19.522 | 7.696 | 99% / 99% | 0.675 | 0.312 | 0.123 | 2.957 | 1.367 | 0.539 | | | 9.07 | Yes |
| | | | | | | | | | | | | | | | |
| 3.714 | 1.464 | 246.375 | 16.269 | 6.414 | 99% / 99% | 0.563 | 0.260 | 0.103 | 2.464 | 1.139 | 0.449 | | | 8.10 | Yes |
| 3.600 | 3.600 | 65.700 | 15.768 | 15.768 | -- | 0.150 | 0.036 | 0.036 | 0.657 | 0.158 | 0.158 | | | 21.25 | Yes |
| 1.143 | 0.429 | 216.810 | 5.006 | 1.877 | 99% / 99% | 0.495 | 0.080 | 0.030 | 2.168 | 0.350 | 0.131 | | | 17.68 | Yes |
| | | | | | | | | | | | | | | 0.00 | Yes |
| 1.143 | 0.429 | 216.810 | 5.006 | 1.877 | 99% / 99% | 0.495 | 0.080 | 0.030 | 2.168 | 0.350 | 0.131 | | | 17.68 | Yes |
| | | | | | | | | | | | | | | 0.00 | Yes |
| 1.143 | 0.429 | 216.810 | 5.006 | 1.877 | 99% / 99% | 0.495 | 0.080 | 0.030 | 2.168 | 0.350 | 0.131 | | | 17.68 | Yes |
| 1.143 | 0.429 | 216.810 | 5.006 | 1.877 | 99% / 99% | 0.495 | 0.080 | 0.030 | 2.168 | 0.350 | 0.131 | | | 17.68 | Yes |
| | | | | | | | | | | | | | | | |
| 0.028 | 0.028 | 0.329 | 0.120 | 0.120 | -- | 0.001 | 0.000 | 0.000 | 0.003 | 0.001 | 0.001 | | | 0.39 | Yes |
| 3.714 | 1.464 | 246.375 | 16.269 | 6.414 | 99% / 99% | 0.563 | 0.260 | 0.103 | 2.464 | 1.139 | 0.449 | | | 8.10 | Yes |
| 0.446 | 0.176 | 29.565 | 1.952 | 0.770 | 99% / 99% | 0.068 | 0.031 | 0.012 | 0.296 | 0.137 | 0.054 | | | 2.18 | Yes |
| 0.069 | 0.026 | 13.009 | 0.300 | 0.113 | 99% / 99% | 0.030 | 0.005 | 0.002 | 0.130 | 0.021 | 0.008 | | | 0.68 | Yes |
| 0.069 | 0.026 | 13.009 | 0.300 | 0.113 | 99% / 99% | 0.030 | 0.005 | 0.002 | 0.130 | 0.021 | 0.008 | | | 0.68 | Yes |
| | | | | | | | | | | | | | | | |
| 0.033 | 0.033 | 0.394 | 0.145 | 0.145 | -- | 0.001 | 0.000 | 0.000 | 0.004 | 0.001 | 0.001 | | | 0.43 | Yes |
| 2.160 | 2.160 | 39.420 | 9.461 | 9.461 | -- | 0.090 | 0.022 | 0.022 | 0.394 | 0.095 | 0.095 | | | 5.79 | Yes |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| 14.529 | 5.186 | 530.856 | 63.635 | 22.713 | 99% / 99% | 1.212 | 1.017 | 0.363 | 5.309 | 4.454 | 1.590 | | | 18.87 | Yes |
| 0.033 | 0.033 | 0.394 | 0.145 | 0.145 | -- | 0.001 | 0.000 | 0.000 | 0.004 | 0.001 | 0.001 | | | 0.43 | Yes |

| | | | | | | | | | | | | | | | | |
|--------|--------|----------|---------|---------|-----------|-------|-------|-------|--------|--------|-------|-------|--------|--|-------|-----|
| | | | | | | | | | | | | | | | | |
| 0.686 | 0.257 | 130.086 | 3.003 | 1.126 | 99% / 99% | 0.297 | 0.048 | 0.018 | 1.301 | 0.210 | 0.079 | | | | 2.84 | Yes |
| 0.686 | 0.257 | 130.086 | 3.003 | 1.126 | 99% / 99% | 0.297 | 0.048 | 0.018 | 1.301 | 0.210 | 0.079 | | | | 2.84 | Yes |
| 0.013 | 0.007 | 0.158 | 0.058 | 0.032 | -- | 0.036 | 0.013 | 0.007 | 0.158 | 0.058 | 0.032 | | | | 0.25 | Yes |
| 2.503 | 1.423 | 140.861 | 10.963 | 6.232 | 99% / 99% | 0.322 | 0.175 | 0.100 | 1.409 | 0.767 | 0.436 | | | | 6.34 | Yes |
| 0.013 | 0.013 | 0.158 | 0.058 | 0.058 | -- | 0.002 | 0.001 | 0.000 | 0.007 | 0.002 | 0.001 | | | | 0.25 | Yes |
| 0.013 | 0.013 | 0.158 | 0.058 | 0.058 | -- | 0.000 | 0.000 | 0.000 | 0.002 | 0.001 | 0.001 | | | | 0.25 | Yes |
| 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | -- | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | | | | |
| 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | -- | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | | | | |
| 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | -- | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | | | | |
| 0.344 | 0.344 | 4.106 | 1.506 | 1.506 | -- | 0.044 | 0.014 | 0.004 | 0.192 | 0.063 | 0.018 | | | | 14.59 | Yes |
| 0.344 | 0.344 | 4.106 | 1.506 | 1.506 | -- | 0.044 | 0.014 | 0.004 | 0.192 | 0.063 | 0.018 | | | | 14.59 | Yes |
| 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | -- | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | | | 0.00 | No |
| 0.344 | 0.344 | 4.106 | 1.506 | 1.506 | -- | 0.044 | 0.014 | 0.004 | 0.192 | 0.063 | 0.018 | | | | 14.59 | Yes |
| 0.344 | 0.344 | 4.106 | 1.506 | 1.506 | -- | 0.044 | 0.014 | 0.004 | 0.192 | 0.063 | 0.018 | | | | 14.59 | Yes |
| 0.344 | 0.344 | 4.106 | 1.506 | 1.506 | -- | 0.044 | 0.014 | 0.004 | 0.192 | 0.063 | 0.018 | | | | 14.59 | Yes |
| 0.344 | 0.344 | 4.106 | 1.506 | 1.506 | -- | 0.044 | 0.014 | 0.004 | 0.192 | 0.063 | 0.018 | | | | 14.59 | Yes |
| 0.344 | 0.344 | 4.106 | 1.506 | 1.506 | -- | 0.044 | 0.014 | 0.004 | 0.192 | 0.063 | 0.018 | | | | 14.59 | Yes |
| 0.344 | 0.344 | 4.106 | 1.506 | 1.506 | -- | 0.044 | 0.014 | 0.004 | 0.192 | 0.063 | 0.018 | | | | 14.59 | Yes |
| 0.344 | 0.344 | 4.106 | 1.506 | 1.506 | -- | 0.044 | 0.014 | 0.004 | 0.192 | 0.063 | 0.018 | | | | 14.59 | Yes |
| 0.344 | 0.344 | 4.106 | 1.506 | 1.506 | -- | 0.044 | 0.014 | 0.004 | 0.192 | 0.063 | 0.018 | | | | 14.59 | Yes |
| 3.480 | 3.480 | 43.800 | 15.242 | 15.242 | -- | 0.880 | 0.296 | 0.296 | 3.854 | 1.296 | 1.296 | | | | 21.13 | Yes |
| 0.440 | 0.440 | 5.256 | 1.927 | 1.927 | -- | 0.056 | 0.018 | 0.005 | 0.245 | 0.081 | 0.023 | | | | 15.18 | Yes |
| 0.440 | 0.440 | 5.256 | 1.927 | 1.927 | -- | 0.056 | 0.018 | 0.005 | 0.245 | 0.081 | 0.023 | | | | 15.18 | Yes |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| 0.346 | 0.052 | 3.208 | 1.517 | 0.230 | 0 | 0.732 | 0.346 | 0.052 | 3.208 | 1.517 | 0.230 | | | | 14.61 | Yes |
| 0.346 | 0.052 | 3.208 | 1.517 | 0.230 | 0 | 0.732 | 0.346 | 0.052 | 3.208 | 1.517 | 0.230 | | | | 14.61 | Yes |
| 0.141 | 0.021 | 1.303 | 0.616 | 0.093 | 0 | 0.297 | 0.141 | 0.021 | 1.303 | 0.616 | 0.093 | | | | 12.65 | Yes |
| 0.141 | 0.021 | 1.303 | 0.616 | 0.093 | 0 | 0.297 | 0.141 | 0.021 | 1.303 | 0.616 | 0.093 | | | | 12.65 | Yes |
| 0.217 | 0.033 | 2.005 | 0.948 | 0.144 | 0 | 0.458 | 0.217 | 0.033 | 2.005 | 0.948 | 0.144 | | | | 13.55 | Yes |
| 0.217 | 0.033 | 2.005 | 0.948 | 0.144 | 0 | 0.458 | 0.217 | 0.033 | 2.005 | 0.948 | 0.144 | | | | 13.55 | Yes |
| 60.266 | 29.305 | 2848.167 | 263.965 | 128.354 | | 6.503 | 3.976 | 1.809 | 28.482 | 17.414 | 7.921 | 0.071 | 12.198 | | | Yes |
| 19.727 | 7.441 | 937.410 | 86.402 | 32.591 | | 2.140 | 1.369 | 0.509 | 9.374 | 5.998 | 2.231 | 0.076 | 10.491 | | | Yes |
| 4.160 | 1.640 | 275.940 | 18.221 | 7.183 | | 0.630 | 0.291 | 0.115 | 2.759 | 1.275 | 0.503 | 0.143 | 2.828 | | | Yes |
| -- | -- | -- | -- | -- | | -- | -- | -- | -- | -- | -- | 0.146 | 2.729 | | | No |
| 0.075 | 0.029 | 13.087 | 0.329 | 0.128 | | 0.048 | 0.011 | 0.005 | 0.209 | 0.050 | 0.024 | 0.235 | 1.008 | | | Yes |
| 0.457 | 0.171 | 86.724 | 2.002 | 0.751 | | 0.198 | 0.032 | 0.012 | 0.867 | 0.140 | 0.053 | 0.100 | 6.040 | | | Yes |
| 2.516 | 1.436 | 141.018 | 11.020 | 6.290 | | 0.322 | 0.175 | 0.100 | 1.410 | 0.768 | 0.437 | 0.072 | 12.047 | | | Yes |
| 1.905 | 0.714 | 361.350 | 8.343 | 3.129 | | 0.498 | 0.081 | 0.030 | 2.183 | 0.353 | 0.132 | 0.203 | 1.367 | | | Yes |
| 0.075 | 0.029 | 13.087 | 0.329 | 0.128 | | 0.048 | 0.011 | 0.005 | 0.209 | 0.050 | 0.024 | 0.211 | 1.265 | | | Yes |
| 12.036 | 4.513 | 982.436 | 52.717 | 19.769 | | 1.753 | 0.283 | 0.106 | 7.678 | 1.241 | 0.465 | 0.084 | 8.637 | | | Yes |
| 36.135 | 16.738 | 1399.651 | 158.269 | 73.313 | | 3.196 | 2.193 | 0.835 | 13.997 | 9.606 | 3.659 | 0.084 | 8.637 | | | Yes |
| 70.907 | 58.207 | 1819.627 | 310.573 | 254.947 | | 4.154 | 1.903 | 1.014 | 18.196 | 8.335 | 4.442 | 0.089 | 7.635 | | | Yes |
| 1.868 | 0.743 | 123.319 | 8.182 | 3.255 | | 0.282 | 0.130 | 0.051 | 1.233 | 0.570 | 0.225 | 0.083 | 8.910 | | | Yes |
| -- | -- | -- | -- | -- | | -- | -- | -- | -- | -- | -- | -- | -- | | | -- |
| -- | -- | -- | -- | -- | | -- | -- | -- | -- | -- | -- | -- | -- | | | -- |
| -- | -- | -- | -- | -- | | -- | -- | -- | -- | -- | -- | -- | -- | | | -- |
| 1.905 | 0.714 | 361.350 | 8.343 | 3.129 | | 0.498 | 0.081 | 0.030 | 2.183 | 0.353 | 0.132 | 0.203 | 1.367 | | | Yes |
| 1.829 | 0.686 | 346.896 | 8.009 | 3.003 | | 0.792 | 0.128 | 0.048 | 3.469 | 0.561 | 0.210 | 0.211 | 1.265 | | | Yes |
| 1.922 | 0.721 | 364.602 | 8.418 | 3.157 | | 0.506 | 0.082 | 0.031 | 2.215 | 0.358 | 0.134 | 0.093 | 6.964 | | | Yes |
| -- | -- | -- | -- | -- | | -- | -- | -- | -- | -- | -- | -- | -- | | | -- |

| Uncontr
PM10
Emissions
(lb/hr) | Uncontr
PM2.5
Emissions
(lb/hr) | Uncontr
PM Emissions
(ton/yr) | Uncontr
PM10
Emissions
(ton/yr) | Uncontr
PM2.5
Emissions
(ton/yr) | Contr
PM
Emissions
(lb/hr) | Contr
PM10
Emissions
(lb/hr) | Contr
PM2.5
Emissions
(lb/hr) | Contr
PM
Emissions
(ton/yr) | Contr
PM10
Emissions
(ton/yr) | Contr
PM2.5
Emissions
(ton/yr) |
|---|--|-------------------------------------|--|---|-------------------------------------|---------------------------------------|--|--------------------------------------|--|---|
| 225.296 | 131.408 | 10186.515 | 986.795 | 575.567 | 26.056 | 12.666 | 5.269 | 114.125 | 55.476 | 23.077 |
| 215.782 | 123.088 | 10074.666 | 945.124 | 539.127 | 21.567 | 10.747 | 4.701 | 94.464 | 47.072 | 20.592 |

FUGI45 - Uncaptured Emissions from Truck (Hopper) Loading

| Fug. Unit # | | CLOSED TOP GRAIN HAULER
UNOILED HOPPER LOADOUT | Daily Capacity
tons/day ^b | Hourly Capacity
tons/hr ^b | Maximum Annual Capacity
tons/yr | PM Emission Factor
lbs/ton ^a | PM10 Emission Factor
lbs/ton ^a | PM2.5 Emission Factor
lbs/ton ^a | Capture Efficiency
% | Control Efficiency
% | Cont. PM Emissions
lbs/hr | Cont. PM-10 Emissions
lbs/hr | Cont. PM-2.5 Emissions
lbs/hr | Cont. PM Emissions
tons/yr | Cont. PM-10 Emissions
tons/yr | Cont. PM-2.5 Emissions
tons/yr | Limited PM Emissions
tons/yr | Limited PM-10 Emissions
tons/yr | Limited PM-2.5 Emissions
tons/yr |
|--|--|---|---|---|------------------------------------|--|--|---|-------------------------|---|------------------------------|---------------------------------|----------------------------------|-------------------------------|----------------------------------|-----------------------------------|---------------------------------|------------------------------------|-------------------------------------|
| FUGI45 | | Uncaptured Emissions - Hopper Load | 1000 | 41.67 | 365,000 | 1.5 | 1.5 | 1.5 | 100% | 99% | 0.6 | 0.6 | 0.6 | 2.74 | 2.74 | 2.74 | 2.74 | 2.74 | 2.74 |
| direct connect (this is the station with the two bins)
Assumed all powders through closed top loadout | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | Note: Emissions represent the uncaptured, uncontrolled portion of the emission from the closed top loadout station. | | | | | | | | | |

| STRU Unit # | Model ID # | OPEN TOP GRAIN HAULER
UNOILED HOPPER LOADOUT | Maximum Capacity
tons/hr ^b | Maximum Annual Capacity
tons/yr | PM Emission Factor
lbs/ton ^c | PM10 Emission Factor
lbs/ton ^c | PM2.5 Emission Factor
lbs/ton ^c | Capture Efficiency
% | Control Efficiency
% | Cont. PM Emissions
lbs/hr | Cont. PM-10 Emissions
lbs/hr | Cont. PM-2.5 Emissions
lbs/hr | Cont. PM Emissions
tons/yr | Cont. PM-10 Emissions
tons/yr | Cont. PM-2.5 Emissions
tons/yr | Limited PM Emissions
tons/yr | Limited PM-10 Emissions
tons/yr | Limited PM-2.5 Emissions
tons/yr |
|---|------------|---|--|------------------------------------|--|--|---|-------------------------|-------------------------|------------------------------|---------------------------------|----------------------------------|-------------------------------|----------------------------------|-----------------------------------|---------------------------------|------------------------------------|-------------------------------------|
| STRU18 | EQUI155 | Captured Emissions - Hopper Load | 78 | 683,280 | 0.0030 | 0.0011 | 0.0011 | 99/93/0% | 0% | 0.002 | 0.006 | 0.086 | 0.01 | 0.03 | 0.38 | 0.01 | 0.03 | 0.38 |
| Only granulars through open top loadout | | | | | | | | | | | | | | | | | | |

Closed top and open top unloading are not additive in this calculation because the overall maximum loadout capacity is 78 tons per hour.
The facility would never make 100% granulars. The calculation is provided to show that the worst case is closed top system loadout.

^aEmission factors for powders are from AP-42, Chapter 11.17.4, Lime Manufacturing, pg. 11.17-11, (2/98). PM10 emission factor is adjusted based on the calculated percentage of airborne granular loadout products that are less than equal 10 microns in diameter.

^b 78 tons per hour based on 3-26 ton trucks per hour

^c Emission factors for granulars are from AP-42, Chapter 11.19.2, Table 11.19.2-2, Crushed Stone Processing and Pulverized Mineral Processing, pg. 11.19.2-8 (8/04). Emission factor is for conveyor transfer - dry.

| | | | | |
|----------------------------|------|------|-------|-------------------------------|
| | PM | PM10 | PM2.5 | |
| TOTAL EMISSIONS (lb/hr): | 0.63 | 0.63 | 0.63 | Worst case is 100% closed top |
| TOTAL EMISSIONS (tons/yr): | 2.74 | 2.74 | 2.74 | Worst case is 100% closed top |

Superior Minerals Company
Storage Piles

C:\Users\thanafy\Downloads\[Superior Minerals Calc 10 30 2025.xlsx]Wind Erosion

FUGI46 - FUGITIVE DUST EMISSIONS FROM WIND EROSION OF PILES

Emission factor of 1.0 tons/acre-yr is from MPCA Air Dispersion Modeling Guidance (Version 2), Dated July 28, 2003. PM10 emissions are assumed to be equal to PM.

| Fug Unit # | Activity | Storage Pile Footprint |
|------------|--|------------------------|
| FUGI46A | Piles - Wind Erosion | 3.5 Acres |
| FUGI46B | Piles - Wind Erosion - Screened Material | 0.494 Acres |

21526.9692 sqft

| Fug Unit # | Activity | PM Emissions lbs/acre/yr | PM-10 Emissions lbs/acre/yr | PM-2.5 Emissions lbs/acre/yr | PM Emissions lbs/hr | PM-10 Emissions lbs/hr | PM-2.5 Emissions lbs/hr | PM Emissions tons/yr | PM-10 Emissions tons/yr | PM-2.5 Emissions tons/yr |
|------------|--|--------------------------|-----------------------------|------------------------------|---------------------|------------------------|-------------------------|----------------------|-------------------------|--------------------------|
| FUGI46A | Piles - Wind Erosion | 1329 | 1329 | 1329 | 0.53 | 0.53 | 0.53 | 2.33 | 2.33 | 2.33 |
| FUGI46B | Piles - Wind Erosion - Screened Material | 1329 | 1329 | 1329 | 0.07 | 0.07 | 0.07 | 0.33 | 0.33 | 0.33 |

FUGITIVE DUST EMISSIONS FROM PRODUCT HANDLING

$$E = k * (0.0032) * (U/5)^{1.3} * (M/2)^{-1.4}$$

where:
E = Emission factor (lb/ton material handled) from AP-42, Section 13.2.4, Equation 1, (1/95).
k = Particle size multiplier (dimensionless) from AP-42, pg. 13.2.4-3.
U = Mean wind speed, (mph) is from AP-42, pg. 13.2.4-3.
M = Mean moisture content (%) is based on predicted site-specific value.

Emission Factor Calculations:

| Source ID | PM2.5 Particle Size Multiplier, k | PM10 Particle Size Multiplier, k | PM Particle Size Multiplier, k | Mean Wind Speed, U (mph) | Moisture Content, M (%) | PM2.5 Uncontrolled Emission Factor, E (lb/ton) | PM10 Uncontrolled Emission Factor, E (lb/ton) | PM Uncontrolled Emission Factor, E (lb/ton) | Control Efficiency (%) |
|-----------|-----------------------------------|----------------------------------|--------------------------------|--------------------------|-------------------------|--|---|---|------------------------|
| FUIG44 | 0.053 | 0.35 | 0.74 | 10.5 | 5.0 | 0.0001 | 0.0008 | 0.0017 | 0% |
| FUIG44 | 0.053 | 0.35 | 0.74 | 10.5 | 5.0 | 0.0001 | 0.0008 | 0.0017 | 0% |
| FUIG44 | 0.053 | 0.35 | 0.74 | 10.5 | 5.0 | 0.0001 | 0.0008 | 0.0017 | 0% |
| FUGI51 | 0.053 | 0.35 | 0.74 | 10.5 | 5.0 | 0.0001 | 0.0008 | 0.0017 | 0% |
| FUGI52A | 0.053 | 0.35 | 0.74 | 10.5 | 5.0 | 0.0001 | 0.0008 | 0.0017 | 0% |
| FUGI52B | 0.053 | 0.35 | 0.74 | 10.5 | 5.0 | 0.0001 | 0.0008 | 0.0017 | 0% |
| FUGI47 | 0.053 | 0.35 | 0.74 | 10.5 | 5.0 | 0.0001 | 0.0008 | 0.0017 | 75% |
| FUGI48 | 0.053 | 0.35 | 0.74 | 10.5 | 5.0 | 0.0001 | 0.0008 | 0.0017 | 0% |
| FUGI50 | 0.053 | 0.35 | 0.74 | 10.5 | 5.0 | 0.0001 | 0.0008 | 0.0017 | 0% |

PM2.5 Emission Calculations for Handling:

| Source ID | Handling Activity | Maximum Throughput (tons/hr) | Controlled PM2.5 Emission Factor, E (lb/ton) | Potential PM2.5 Emissions | |
|-----------|--|------------------------------|--|---------------------------|----------------------------|
| | | | | Emission Rate (lbs/hr) | Annual Emissions (tons/yr) |
| FUIG44 | Feed Hopper - Raymond Mill | 25 | 0.0001 | 0.00 | 0.01 |
| FUIG44 | Feed Hopper - Bradley Mill | 55 | 0.0001 | 0.01 | 0.03 |
| FUIG44 | Feed Hopper - Williams Mill | 50 | 0.0001 | 0.01 | 0.03 |
| FUGI51 | Feed Hopper - Lehigh Mill | 12 | 0.0001 | 0.00 | 0.01 |
| FUGI52A | Pile Unloading - Raymond, Bradley and Williams | 400 | 0.0001 | 0.05 | 0.07 |
| FUGI52B | Pile Unloading - Lehigh Mill | 12 | 0.0001 | 0.00 | 0.07 |
| FUGI47 | 12' Hopper - River Dock Unloading | 400 | 0.0001 | 0.05 | 0.08 |
| FUGI48 | Asphalt Pad Truck Loadout | 137 | 0.0001 | 0.02 | 0.07 |
| FUGI50 | Screened Material Loader | 400 | 0.0001 | 0.05 | 0.22 |

PM10 Emission Calculations for Handling:

| Source ID | Handling Activity |
|-----------|--|
| FUIG44 | Feed Hopper - Raymond Mill |
| FUIG44 | Feed Hopper - Bradley Mill |
| FUIG44 | Feed Hopper - Williams Mill |
| FUGI51 | Feed Hopper - Lehigh Mill |
| FUGI52A | Pile Unloading - Raymond, Bradley and Williams |
| FUGI52B | Pile Unloading - Lehigh Mill |
| FUGI47 | 12' Hopper - River Dock Unloading |
| FUGI48 | Asphalt Pad Truck Loadout |
| FUGI50 | Screened Material Loader |

FUGITIVE DUST PM10 EMISSIONS FOR UNPAVED ROADS (EXISTING)

E = k * (s/12)^a * (W/3)^b * [(365-p)/365]

where:
E = Emission factor (lb/VMT, vehicle miles traveled) from AP-42, Section 13.2.2, Equation 1a (unpaved roads at industrial sites), (12/03)
k = Particle size multiplier (lb/VMT) from AP-42, Table 13.2.2-2.
a,b,c = Empirical constants (a, b) from AP-42, Table 13.2.2-2.
s = Silt content is based on site-specific sampling at Superior Minerals on 11/22/05.
W = Mean vehicle weight based on the "fleet" average weight of all vehicles traveling the road.
p = Number of days with at least 0.01 in. of precipitation per year from AP-42, Figure 13.2.2-1.

Fugitive Dust Emission Factor Calculations for PM Emissions from Unpaved Roads

| Fug Unit # | Activity | PM2.5 Particle Size Multiplier, k (lb/VMT) | PM10 Particle Size Multiplier, k (lb/VMT) | PM10 Particle Size Multiplier, k (lb/VMT) | Empirical Constants | | Silt Content (%) | Mean Vehicle Weight, W (tons) | Precipitation Days, p (days) | Uncontrolled PM2.5 Emission Factor, E (lb/VMT) | Uncontrolled PM10 Emission Factor, E (lb/VMT) | Uncontrolled PM Emission Factor, E (lb/VMT) | Control Efficiency ¹ (%) |
|------------|--|--|---|---|---------------------|------|------------------|-------------------------------|------------------------------|--|---|---|-------------------------------------|
| | | | | | a | b | | | | | | | |
| FUGI43A | Front End Loader - Raymond Mill - Full | 0.15 | 1.5 | 4.9 | 0.9 | 0.45 | 1.46 | 26 | 110 | 0.04 | 0.41 | 1.35 | 75% |
| FUGI43A | Front End Loader - Raymond Mill - Empty | 0.15 | 1.5 | 4.9 | 0.9 | 0.45 | 1.46 | 21 | 110 | 0.04 | 0.38 | 1.23 | 75% |
| FUGI43A | Front End Loader - Bradley Mill - Full | 0.15 | 1.5 | 4.9 | 0.9 | 0.45 | 1.46 | 26 | 110 | 0.04 | 0.41 | 1.35 | 75% |
| FUGI43A | Front End Loader - Bradley Mill - Empty | 0.15 | 1.5 | 4.9 | 0.9 | 0.45 | 1.46 | 21 | 110 | 0.04 | 0.38 | 1.23 | 75% |
| FUGI43B | Front End Loader - Williams Mill - Full | 0.15 | 1.5 | 4.9 | 0.9 | 0.45 | 1.46 | 26 | 110 | 0.04 | 0.41 | 1.35 | 75% |
| FUGI43B | Front End Loader - Williams Mill - Empty | 0.15 | 1.5 | 4.9 | 0.9 | 0.45 | 1.46 | 21 | 110 | 0.04 | 0.38 | 1.23 | 75% |
| FUGI43C | Front End Loader - Lehigh Mill - Full | 0.15 | 1.5 | 4.9 | 0.9 | 0.45 | 1.46 | 26 | 110 | 0.04 | 0.41 | 1.35 | 75% |
| FUGI43C | Front End Loader - Lehigh Mill - Empty | 0.15 | 1.5 | 4.9 | 0.9 | 0.45 | 1.46 | 21 | 110 | 0.04 | 0.38 | 1.23 | 75% |
| FUGI49 | Front End Loader - Small - Full | 0.15 | 1.5 | 4.9 | 0.9 | 0.45 | 1.46 | 26 | 110 | 0.04 | 0.42 | 1.36 | 75% |
| FUGI49 | Front End Loader - Small - Empty | 0.15 | 1.5 | 4.9 | 0.9 | 0.45 | 1.46 | 21 | 110 | 0.04 | 0.38 | 1.23 | 75% |

Fugitive Dust Calculations for PM2.5 Emissions from Unpaved Roads

| Road Segment | | Controlled PM2.5 Factor, E (lb/VMT) | Maximum Trips/hr | Feet per Trip | Vehicle Miles Traveled (VMT/hr) | Controlled PM2.5 Emissions | | Material Handling Check: | | | | Maxium Bottlenecked Annual Throughput (tons/yr) |
|--------------|--|-------------------------------------|------------------|---------------|---------------------------------|----------------------------|-------------------------------|--------------------------|----------|---------|---------|---|
| | | | | | | Hourly (lb/hr) | Annual (tons/yr) ² | tons/trip | trips/hr | tons/hr | tons/yr | |
| FUGI43 | Front End Loader - Raymond Mill - Full | 0.010 | 5 | 285 | 0.29 | 0.003 | 0.013 | | | | | |
| FUGI43 | Front End Loader - Raymond Mill - Empty | 0.010 | 5 | 285 | 0.29 | 0.003 | 0.013 | 4.7 | 5 | 25 | 219,000 | 219,000 |
| FUGI43 | Front End Loader - Bradley Mill - Full | 0.010 | 12 | 285 | 0.63 | 0.006 | 0.028 | | | | | |
| FUGI43 | Front End Loader - Bradley Mill - Empty | 0.010 | 12 | 285 | 0.63 | 0.006 | 0.028 | 4.7 | 12 | 55 | 481,800 | 481,800 |
| FUGI43 | Front End Loader - Williams Mill - Full | 0.010 | 11 | 230 | 0.46 | 0.005 | 0.020 | | | | | |
| FUGI43 | Front End Loader - Williams Mill - Empty | 0.010 | 11 | 230 | 0.46 | 0.005 | 0.020 | 4.7 | 11 | 50 | 438,000 | 438,000 |
| FUGI43 | Front End Loader - Lehigh Mill - Full | 0.010 | 3 | 75 | 0.04 | 0.000 | 0.002 | | | | | |
| FUGI43 | Front End Loader - Lehigh Mill - Empty | 0.010 | 3 | 75 | 0.04 | 0.000 | 0.002 | 4.7 | 3 | 12 | 105,120 | 105,120 |
| FUGI49 | Front End Loader - Small - Full | 0.010 | 1 | 285 | 0.05 | 0.001 | 0.002 | | | | | |
| FUGI49 | Front End Loader - Small - Empty | 0.010 | 1 | 285 | 0.05 | 0.001 | 0.002 | 4.7 | 1 | 12 | 105,120 | 105,120 |

¹ 75% control was assumed (watering or chemical dust suppressant application).
² Annual emissions are based on a maximum of 4 barges per day and a maximum shipping season of 8 months per year

Fugitive Dust Calculations for PM10 Emissions from Unpaved Roads

| Road Segment | | Controlled PM10 Factor, E (lb/VMT) | Maximum Trips/hr | Feet per Trip | Vehicle Miles Traveled (VMT/hr) | Controlled PM10 Emissions | |
|--------------|--|------------------------------------|------------------|---------------|---------------------------------|---------------------------|-------------------------------|
| | | | | | | Hourly (lb/hr) | Annual (tons/yr) ² |
| FUGI43 | Front End Loader - Raymond Mill - Full | 0.1025 | 5 | 285 | 0.29 | 0.029 | 0.129 |
| FUGI43 | Front End Loader - Raymond Mill - Empty | 0.095 | 5 | 285 | 0.29 | 0.027 | 0.119 |
| FUGI43 | Front End Loader - Bradley Mill - Full | 0.1025 | 12 | 285 | 0.63 | 0.065 | 0.284 |
| FUGI43 | Front End Loader - Bradley Mill - Empty | 0.095 | 12 | 285 | 0.63 | 0.060 | 0.263 |
| FUGI43 | Front End Loader - Williams Mill - Full | 0.1025 | 11 | 230 | 0.46 | 0.047 | 0.208 |
| FUGI43 | Front End Loader - Williams Mill - Empty | 0.095 | 11 | 230 | 0.46 | 0.044 | 0.193 |
| FUGI43 | Front End Loader - Lehigh Mill - Full | 0.1025 | 3 | 75 | 0.04 | 0.004 | 0.016 |
| FUGI43 | Front End Loader - Lehigh Mill - Empty | 0.095 | 3 | 75 | 0.04 | 0.003 | 0.015 |
| FUGI49 | Front End Loader - Small - Full | 0.1050 | 1 | 285 | 0.05 | 0.006 | 0.025 |
| FUGI49 | Front End Loader - Small - Empty | 0.095 | 1 | 285 | 0.05 | 0.005 | 0.022 |

Fugitive Dust Calculations for PM Emissions from Unpaved Roads

| Road | Controlled PM | | Vehicle Miles | Controlled PM Emissions |
|------|---------------|--|---------------|-------------------------|
|------|---------------|--|---------------|-------------------------|

Superior Minerals Company
Emission Calculations - Pet Coke Storage Project
Handling Emissions

C:\Users\thanafy\Downloads\[Superior Minerals Calc 10 30 2025.xlsx]Pet Coke Handling Emissions

| TEMPO
ID
No | Source Description | Notes | Hourly
Throughput ¹
(tons/hr) | Limited
Annual Throughput
(tons/yr) | Emission Factor Input Parameters | | | | Particulate Emission
Factor | | | | |
|-------------------|--|-----------------------------|--|---|----------------------------------|------------------------------|---|-------------------------|--------------------------------|------------------|-------------------|-----------------|-----------|
| | | | | | Silt ²
(%) | Moisture ²
(%) | Max Wind Speed ³
(miles/hr) | Surface Area
(Acres) | PM | PM ₁₀ | PM _{2.5} | Units | Reference |
| EQUI131 | Pet Coke Unloading to Conveyor 1 | -- | 500 | 400,000 | NA | 5.25 | 9.8 | -- | 0.00146 | 0.00069 | 0.00010 | lb/ton | 13.2.4-3 |
| EQUI132 | Pet Coke Conveyor 1 Transfer Point to
Stacker | -- | 500 | 400,000 | NA | 5.25 | 9.8 | -- | 0.00146 | 0.00069 | 0.00010 | lb/ton | 13.2.4-3 |
| EQUI133 | Pet Coke Stacker Conveyor Transfer
Point 2 | Located in 3 sided building | 500 | 400,000 | NA | 5.25 | 4.9 | -- | 0.00059 | 0.00028 | 0.00004 | lb/ton | 13.2.4-3 |
| EQUI135 | Pet Coke Front End Loader to Hopper
Conveyor System | Located in 3 sided building | 500 | 400,000 | NA | 5.25 | 4.9 | -- | 0.00059 | 0.00028 | 0.00004 | lb/ton | 13.2.4-3 |
| EQUI134 | Pet Coke Conveyor Transfer Point 3 | -- | 313 | 400,000 | NA | 5.25 | 9.8 | -- | 0.00146 | 0.00069 | 0.00010 | lb/ton | 13.2.4-3 |
| EQUI143 | Pet Coke Barge Loading | -- | 313 | 400,000 | NA | 5.25 | 9.8 | -- | 0.00146 | 0.00069 | 0.00010 | lb/ton | 13.2.4-3 |
| | | | | | | | | | | | | Total Emissions | |

1 - Throughput Information for Pet Coke Project
500 tons per hour is based on the throughput prior to unloading system. This value is based on the maximum hourly amount the trucks could haul and unloading in an hour.

20 trucks/hr
25 tons/truck
500 tons/hr

Based on 1 truck unloading every 3 minutes. Maximum unloading rate of the system.

The capacity post hopper is based on 5 barges per day at 1500 tons per barge.

2 - Superior Minerals has estimated the annual capacity of the pet coke system. The permitting applicability is based on unlimited annual throughput.

3 - Moisture content from pet coke SDS. Average of value from product specification sheet.

4 - Average wind speed obtained from MSP meteorological data from 2012-2016

| Dust Control Strategy | | Uncontrolled Emissions | | | | | | Controlled Emissions | | | | | | Limited Controlled Annual Emissions | | |
|-----------------------|------------------------|------------------------|-----------------------------|------------------------------|-----------------|-------------------------------|--------------------------------|----------------------|-----------------------------|------------------------------|-----------------|-------------------------------|--------------------------------|-------------------------------------|-------------------------------|--------------------------------|
| Control Method | Control Efficiency (%) | PM
(lb/hr) | PM ₁₀
(lb/hr) | PM _{2.5}
(lb/hr) | PM
(tons/yr) | PM ₁₀
(tons/yr) | PM _{2.5}
(tons/yr) | PM
(lb/hr) | PM ₁₀
(lb/hr) | PM _{2.5}
(lb/hr) | PM
(tons/yr) | PM ₁₀
(tons/yr) | PM _{2.5}
(tons/yr) | PM
(tons/yr) | PM ₁₀
(tons/yr) | PM _{2.5}
(tons/yr) |
| None | 0 | 0.73 | 0.35 | 0.05 | 3.21 | 1.52 | 0.23 | 0.73 | 0.35 | 0.05 | 3.21 | 1.52 | 0.23 | 0.29 | 0.14 | 0.02 |
| None | 0 | 0.73 | 0.35 | 0.05 | 3.21 | 1.52 | 0.23 | 0.73 | 0.35 | 0.05 | 3.21 | 1.52 | 0.23 | 0.29 | 0.14 | 0.021 |
| None | 0 | 0.30 | 0.14 | 0.02 | 1.30 | 0.62 | 0.09 | 0.30 | 0.14 | 0.02 | 1.30 | 0.62 | 0.09 | 0.12 | 0.06 | 0.009 |
| None | 0 | 0.30 | 0.14 | 0.02 | 1.30 | 0.62 | 0.09 | 0.30 | 0.14 | 0.02 | 1.30 | 0.62 | 0.09 | 0.12 | 0.06 | 0.009 |
| None | 0 | 0.46 | 0.22 | 0.03 | 2.01 | 0.95 | 0.14 | 0.46 | 0.22 | 0.03 | 2.01 | 0.95 | 0.14 | 0.29 | 0.14 | 0.021 |
| None | 0 | 0.46 | 0.22 | 0.03 | 2.01 | 0.95 | 0.14 | 0.46 | 0.22 | 0.03 | 2.01 | 0.95 | 0.14 | 0.29 | 0.14 | 0.021 |
| missions for Project: | | 2.98 | 1.41 | 0.21 | 13.03 | 6.16 | 0.93 | 2.98 | 1.41 | 0.21 | 13.03 | 6.16 | 0.93 | 1.41 | 0.67 | 0.10 |

Superior Minerals Company
Combustion Emission Calculations

AQD Facility ID No.:
 Facility Name: Bradley Rotary Dryer #2 7.5x60 48MM BTU (comb.)
 Emission Unit Identification No.: EQUI55
 Stack/Vent Designation No.: SV014/STRU1
 Maximum Rated Boiler Capacity: 48 MMBtu/hr
 Control Equipment:
 Fuel Parameters:

Heat Value Distillate Oil: As MMBtu/gal = 0.14
 Ultra Low Sulfur Standards: 15 ppm
 Equivalent to: 0.000015

| Fuel Type | Sulfur | % Ash | Heat Value | Maximum Fuel Consumption Rate |
|---------------------|---------|------------|-----------------|-------------------------------|
| Distillate Fuel Oil | 0.0015% | negligible | 140,000 Btu/gal | 342.9 gal/hr |
| for AP-42, S= | | 0.0015 | | |

Calculations Summary - Distillate Fuel Oil

| Pollutant | Emission Factor (lb/MMBtu) | Emission Factor (lb/gal) | Emission Factor Source | Emission Rate (lb/hr) | Maximum Uncontrolled Emissions (tpy) | Pollution Control Efficiency (%) | Limited Controlled Emissions (tpy) |
|--------------------------------|----------------------------|--------------------------|---------------------------|-----------------------|--------------------------------------|----------------------------------|------------------------------------|
| PM | 0.0236 | 0.0033 | AP-42 Tables 1.3-1, 1.3-2 | 1.13 | 4.96 | 0% | 4.96 |
| PM ₁₀ | 0.0236 | 0.0033 | AP-42 Tables 1.3-1, 1.3-2 | 1.13 | 4.96 | 0% | 4.96 |
| PM _{2.5} | | 0.0033 | AP-42 Tables 1.3-1, 1.3-2 | 1.13 | 4.96 | 0% | 4.96 |
| SO _x | 0.0015 | 0.0002 | AP-42 Table 1.3-1 | 0.07 | 0.32 | 0% | 0.32 |
| NO _x | 0.1250 | 0.0200 | AP-42 Table 1.3-1 | 6.86 | 30.03 | 0% | 30.03 |
| VOC | 0.00143 | 0.0003 | AP-42 Table 1.3-3 | 0.09 | 0.38 | 0% | 0.38 |
| CO | -- | 0.0050 | AP-42 Table 1.3-1 | 1.71 | 7.51 | 0% | 7.51 |
| Lead (Pb) (9439-92-1) | 9.00E-06 | 1.26E-06 | AP-42 Table 1.3-10 | 4.32E-04 | 1.89E-03 | 0% | 1.89E-03 |
| GHGs: | | | | | | | |
| CO ₂ | 163.05 | | 40 CFR Part 98, Subpart C | 7,827 | 34,280 | 0% | 34,280 |
| CH ₄ | 6.61E-03 | | 40 CFR Part 98, Subpart C | 3.17E-01 | 1.39E+00 | 0% | 1.39E+00 |
| N ₂ O | 1.32E-03 | | 40 CFR Part 98, Subpart C | 6.35E-02 | 2.78E-01 | 0% | 2.78E-01 |
| CO ₂ e | | | | 7,853 | 34,398 | 0% | 34,398 |
| HAPs: | | | | | | | |
| Arsenic (As) (7440-38-2) | 4.00E-06 | 5.60E-07 | AP-42 Table 1.3-10 | 1.92E-04 | 8.41E-04 | 0% | 8.41E-04 |
| Benzene (71-43-2) | | 2.14E-07 | AP-42 Table 1.3-9 | 7.34E-05 | 3.21E-04 | 0% | 3.21E-04 |
| Beryllium (Be) (7440-41-7) | 3.00E-06 | 4.20E-07 | AP-42 Table 1.3-9 | 1.44E-04 | 6.31E-04 | 0% | 6.31E-04 |
| Cadmium (Cd) (7440-43-9) | 3.00E-06 | 4.20E-07 | AP-42 Table 1.3-10 | 1.44E-04 | 6.31E-04 | 0% | 6.31E-04 |
| Chromium (Cr) (7440-47-3) | 3.00E-06 | 4.20E-07 | AP-42 Table 1.3-10 | 1.44E-04 | 6.31E-04 | 0% | 6.31E-04 |
| Cobalt (7440-48-4) | | N/A | | | | | |
| 1,4-Dichlorobenzene (106-46-7) | | N/A | | | | | |
| Ethylbenzene (100-41-4) | | 6.36E-08 | AP-42 Table 1.3-9 | 2.18E-05 | 9.55E-05 | 0% | 9.55E-05 |
| Formaldehyde (50-00-0) | | 3.30E-05 | AP-42 Table 1.3-9 | 1.13E-02 | 4.96E-02 | 0% | 4.96E-02 |
| n-Hexane (110-54-3) | | N/A | | | | | |
| Manganese (Mn) (7439-96-5) | 6.00E-06 | 8.40E-07 | AP-42 Table 1.3-10 | 2.88E-04 | 1.26E-03 | 0% | 1.26E-03 |
| Mercury (Hg) (7439-97-6) | 3.00E-06 | 4.20E-07 | AP-42 Table 1.3-10 | 1.44E-04 | 6.31E-04 | 0% | 6.31E-04 |
| Naphthalene (91-20-3) | | 1.13E-06 | AP-42 Table 1.3-9 | 3.87E-04 | 1.70E-03 | 0% | 1.70E-03 |
| Nickel (Ni) (7440-02-0) | 3.00E-06 | 4.20E-07 | AP-42 Table 1.3-10 | 1.44E-04 | 6.31E-04 | 0% | 6.31E-04 |
| POM/PAH (w/Naphthalene) | | 1.19E-06 | AP-42 Table 1.3-9 | 4.08E-04 | 1.79E-03 | 0% | 1.79E-03 |
| Selenium (Se) (7782-49-2) | 1.50E-05 | 2.10E-06 | AP-42 Table 1.3-10 | 7.20E-04 | 3.15E-03 | 0% | 3.15E-03 |
| Toluene (108-88-3) | | 6.20E-06 | AP-42 Table 1.3-9 | 2.13E-03 | 9.31E-03 | 0% | 9.31E-03 |
| o-Xylene (95-47-6) | | 1.09E-07 | AP-42 Table 1.3-9 | 3.74E-05 | 1.64E-04 | 0% | 1.64E-04 |
| Total HAP | | | | 0.02 | 0.07 | | 0.07 |

GHG EF from 40 CFR Part 98, Subpart C. CO₂e EF calculated based on Global Warming Potential (GWP) as follows:

| GHG Pollutant | GWP | Mass EF (kg/MMBtu) | Mass EF (lb/MMBtu) | CO ₂ e EF (lb/MMBtu) |
|-------------------|-----|--------------------|--------------------|---------------------------------|
| CO ₂ | 1 | 73.96 | 163.05 | 163.05 |
| CH ₄ | 28 | 3.00E-03 | 6.61E-03 | 1.65E-01 |
| N ₂ O | 265 | 6.00E-04 | 1.32E-03 | 3.94E-01 |
| CO ₂ e | --- | --- | --- | 163.61 |

Conversion factor:
 2.2046 lb/kg

Notes: (1) Naphthalene is counted separately and included in POM/PAH and has been subtracted from the total so as not to be double counted.

| Metal HAPs from AP-42 Table 1.3-10 | AP-42 EF (lb/10¹² Btu) | AP-42 EF (lb/10¹² Btu) | as lb/gal |
|---|--|--|------------------|
| Lead (Pb) (9439-92-1) | 9 | 9 | 1.26E-06 |
| Arsenic (As) (7440-38-2) | 4 | 4 | 5.60E-07 |
| Beryllium (Be) (7440-41-7) | 3 | 3 | 4.20E-07 |
| Cadmium (Cd) (7440-43-9) | 3 | 3 | 4.20E-07 |
| Chromium (Cr) (7440-47-3) | 3 | 3 | 4.20E-07 |
| Manganese (Mn) (7439-96-5) | 6 | 6 | 8.40E-07 |
| Mercury (Hg) (7439-97-6) | 3 | 3 | 4.20E-07 |
| Nickel (Ni) (7440-02-0) | 4 | 4 | 5.60E-07 |
| Selenium (Se) (7782-49-2) | 15 | 15 | 2.10E-06 |
| Org HAPs From AP-42 Table 1.3-9: | EF (lb/10³ gal) | EF (lb/10³ gal) | as lb/gal |
| Benzene (71-43-2) | 2.14E-04 | 2.14E-04 | 2.14E-07 |
| Ethylbenzene (100-41-4) | 6.36E-05 | 6.36E-05 | 6.36E-08 |
| Formaldehyde (50-00-0) | 3.30E-02 | 3.30E-02 | 3.30E-05 |
| Toluene (108-88-3) | 6.20E-03 | 6.20E-03 | 6.20E-06 |
| o-Xylene (95-47-6) | 1.09E-04 | 1.09E-04 | 1.09E-07 |
| POM Breakdown From AP-42 Table 1.3-9: | EF (lb/10³ gal) | EF (lb/10³ gal) | as lb/gal |
| Acenaphthene (83-32-9) | 2.11E-05 | 2.11E-05 | 2.11E-08 |
| Acenaphthylene (208-96-8) | 2.53E-07 | 2.53E-07 | 2.53E-10 |
| Anthracene (120-12-7) | 1.22E-06 | 1.22E-06 | 1.22E-09 |
| Benz(a)anthracene (56-55-3) | 4.01E-06 | 4.01E-06 | 4.01E-09 |
| Benzo(b,k)fluoranthene (b=205-99-2, k=207-08-9) | 1.48E-06 | 1.48E-06 | 1.48E-09 |
| Benzo(g,h,i)perylene (191-24-2) | 2.26E-06 | 2.26E-06 | 2.26E-09 |
| Chrysene (218-01-9) | 2.38E-06 | 2.38E-06 | 2.38E-09 |
| Dibenzo(a,h)anthracene (53-70-3) | 1.67E-06 | 1.67E-06 | 1.67E-09 |
| Fluoranthene (206-44-0) | 4.84E-06 | 4.84E-06 | 4.84E-09 |
| Fluorene (86-73-7) | 4.47E-06 | 4.47E-06 | 4.47E-09 |
| Indeno(1,2,3-cd)pyrene (193-39-5) | 2.14E-06 | 2.14E-06 | 2.14E-09 |
| Phenanthrene (85-01-8) | 1.05E-05 | 1.05E-05 | 1.05E-08 |
| Pyrene (129-00-0) | 4.25E-06 | 4.25E-06 | 4.25E-09 |
| Naphthalene (91-20-3) | 1.13E-03 | 1.13E-03 | 1.13E-06 |
| Total POM/PAH (w/Naphthalene) | 1.19E-03 | 1.19E-03 | 1.19E-06 |
| Total POM/PAH (w/out Naphthalene) | 6.06E-05 | 6.06E-05 | 6.06E-08 |

Superior Minerals Company
Combustion Emission Calculations

AQD Facility ID No.:
Facility Name: Bradley Roller Mill, Air Separator and Heater (15 MM Btu) (comb.)
Emission Unit Identification No.: EQUI29
Stack/Vent Designation No.: SV014/STRU1

Maximum Rated Boiler Capacity: 15.0 MMBtu/hr
Control Equipment:
Fuel Parameters:

| Fuel Type | Sulfur | % Ash | Heat Value | Maximum Fuel Consumption Rate |
|-------------|----------------|------------|--------------|-------------------------------|
| Natural Gas | 0.4 gr/100 scf | negligible | 1,020 Btu/cf | 0.0147 10 ⁶ cf/hr |

Calculations Summary - Primary Fuel : Natural Gas

| Pollutant | Emission Factor
(lb/MMBtu) | Emission Factor
(lb/10 ⁶ scf) | Emission Factor Source | Emission Rate
(lb/hr) | Maximum
Uncontrolled
Emissions (tpy) | Pollution Control
Efficiency (%) | Limited Controlled
Emissions (tpy) |
|--------------------------------|-------------------------------|---|---------------------------|--------------------------|--|-------------------------------------|---------------------------------------|
| PM | -- | 7.60 | AP-42 Table 1.4-2 | 0.11 | 0.49 | 0% | 0.49 |
| PM ₁₀ | -- | 7.60 | AP-42 Table 1.4-2 | 0.11 | 0.49 | 0% | 0.49 |
| PM _{2.5} | -- | 7.60 | AP-42 Table 1.4-2 | 0.11 | 0.49 | 0% | 0.49 |
| SO _x | -- | 0.60 | AP-42 Table 1.4-2 | 0.01 | 0.04 | 0% | 0.04 |
| NO _x | -- | 100.00 | AP-42 Table 1.4-1 | 1.47 | 6.44 | 0% | 6.44 |
| VOC | -- | 5.50 | AP-42 Table 1.4-2 | 0.08 | 0.35 | 0% | 0.35 |
| CO | -- | 84.00 | AP-42 Table 1.4-1 | 1.24 | 5.41 | 0% | 5.41 |
| Lead (Pb) (9439-92-1) | -- | 5.00E-04 | AP-42 Table 1.4-2 | 7.35E-06 | 3.22E-05 | 0% | 3.22E-05 |
| GHGs: | | | | | | | |
| CO ₂ | 116.98 | -- | 40 CFR Part 98, Subpart C | 1,755 | 7,685 | 0% | 7,685 |
| CH ₄ | 2.20E-03 | -- | 40 CFR Part 98, Subpart C | 3.31E-02 | 1.45E-01 | 0% | 1.45E-01 |
| N ₂ O | 2.20E-04 | -- | 40 CFR Part 98, Subpart C | 3.31E-03 | 1.45E-02 | 0% | 1.45E-02 |
| CO ₂ e | | -- | | 1,756 | 7,693 | 0% | 7,693 |
| HAPs: | | | | | | | |
| Arsenic (7440-38-2) | | 2.00E-04 | AP-42 Table 1.4-3 | 2.94E-06 | 1.29E-05 | 0% | 1.29E-05 |
| Benzene (71-43-2) | | 2.10E-03 | AP-42 Table 1.4-3 | 3.09E-05 | 1.35E-04 | 0% | 1.35E-04 |
| Beryllium (7440-41-7) | | 1.20E-05 | AP-42 Table 1.4-3 | 1.76E-07 | 7.73E-07 | 0% | 7.73E-07 |
| Cadmium (7440-43-9) | | 1.10E-03 | AP-42 Table 1.4-3 | 1.62E-05 | 7.09E-05 | 0% | 7.09E-05 |
| Chromium (7440-47-3) | | 1.40E-03 | AP-42 Table 1.4-3 | 2.06E-05 | 9.02E-05 | 0% | 9.02E-05 |
| Cobalt (7440-48-4) | | 8.40E-05 | AP-42 Table 1.4-3 | 1.24E-06 | 5.41E-06 | 0% | 5.41E-06 |
| 1,4-Dichlorobenzene (106-46-7) | | 1.20E-03 | AP-42 Table 1.4-3 | 1.76E-05 | 7.73E-05 | 0% | 7.73E-05 |
| Ethylbenzene (100-41-4) | | N/A | -- | | | | |
| Formaldehyde (50-00-0) | | 7.50E-02 | AP-42 Table 1.4-3 | 1.10E-03 | 4.83E-03 | 0% | 4.83E-03 |
| Hexane (110-54-3) | | 1.80E+00 | AP-42 Table 1.4-3 | 2.65E-02 | 1.16E-01 | 0% | 1.16E-01 |
| Manganese (7439-96-5) | | 3.80E-04 | AP-42 Table 1.4-3 | 5.59E-06 | 2.45E-05 | 0% | 2.45E-05 |
| Mercury (7439-97-6) | | 2.60E-04 | AP-42 Table 1.4-3 | 3.82E-06 | 1.67E-05 | 0% | 1.67E-05 |
| Naphthalene (91-20-3) | | 6.10E-04 | AP-42 Table 1.4-3 | 8.97E-06 | 3.93E-05 | 0% | 3.93E-05 |
| Nickel (7440-02-0) | | 2.10E-03 | AP-42 Table 1.4-3 | 3.09E-05 | 1.35E-04 | 0% | 1.35E-04 |
| POM/PAH (w/Naphthalene) | | 6.98E-04 | AP-42 Table 1.4-3 | 1.03E-05 | 4.50E-05 | 0% | 4.50E-05 |
| Selenium (7782-49-2) | | 2.40E-05 | AP-42 Table 1.4-3 | 3.53E-07 | 1.55E-06 | 0% | 1.55E-06 |
| Toluene (108-88-3) | | 3.40E-03 | AP-42 Table 1.4-3 | 5.00E-05 | 2.19E-04 | 0% | 2.19E-04 |
| o-Xylene (95-47-6) | | N/A | -- | | | | |
| Total HAPs | | | | 0.03 | 0.12 | | 0.12 |

GHG EF from 40 CFR Part 98, Subpart C. CO₂e EF calculated based on Global Warming Potential (GWP) as follows:

| GHG Pollutant | GWP | Mass EF (kg/MMBtu) | Mass EF
(lb/MMBtu) | CO ₂ e EF
(lb/MMBtu) |
|-------------------|-----|--------------------|-----------------------|------------------------------------|
| CO ₂ | 1 | 53.06 | 116.98 | 116.98 |
| CH ₄ | 28 | 1.00E-03 | 2.20E-03 | 5.51E-02 |
| N ₂ O | 265 | 1.00E-04 | 2.20E-04 | 6.57E-02 |
| CO ₂ e | --- | --- | --- | 117.10 |

Conversion factor:
2.2046 lb/kg

Notes: (1) Naphthalene is counted separately and included in POM/PAH and has been subtracted from the total so as not to be double counted.

| POM Breakdown From AP-42 Table 1.4-3: | EF (lb/10⁶ scf) | EF (lb/10⁶ scf) |
|--|-----------------------------------|-----------------------------------|
| 2-Methylnaphthalene (91-57-6) | 2.40E-05 | 2.40E-05 |
| 3-Methylchloranthrene (56-49-5) | 1.80E-06 | 1.80E-06 |
| 7,12-Dimethylbenz(a)anthracene (57-97-6) | 1.60E-05 | 1.60E-05 |
| Acenaphthene (83-32-9) | 1.80E-06 | 1.80E-06 |
| Acenaphthylene (208-96-8) | 1.80E-06 | 1.80E-06 |
| Anthracene (120-12-7) | 2.40E-06 | 2.40E-06 |
| Benz(a)anthracene (56-55-3) | 1.80E-06 | 1.80E-06 |
| Benzo(a)pyrene (50-32-8) | 1.20E-06 | 1.20E-06 |
| Benzo(b)fluoranthene (205-99-2) | 1.80E-06 | 1.80E-06 |
| Benzo(g,h,i)perylene (191-24-2) | 1.20E-06 | 1.20E-06 |
| Benzo(k)fluoranthene (207-08-9) | 1.80E-06 | 1.80E-06 |
| Chrysene (218-01-9) | 1.80E-06 | 1.80E-06 |
| Dibenzo(a,h)anthracene (53-70-3) | 1.20E-06 | 1.20E-06 |
| Fluoranthene (206-44-0) | 3.00E-06 | 3.00E-06 |
| Fluorene (86-73-7) | 2.80E-06 | 2.80E-06 |
| Indeno(1,2,3-cd)pyrene (193-39-5) | 1.80E-06 | 1.80E-06 |
| Phenanathrene (85-01-8) | 1.70E-05 | 1.70E-05 |
| Pyrene (129-00-0) | 5.00E-06 | 5.00E-06 |
| Naphthalene (91-20-3) | 6.10E-04 | 6.10E-04 |
| Total POM/PAH (w/Naphthalene) | 6.98E-04 | 6.98E-04 |
| Total POM/PAH (w/out Naphthalene) | 8.82E-05 | 8.82E-05 |

AP-42 has CAS # wrong

AP-42 has CAS # wrong

Superior Minerals Company
Combustion Emission Calculations

AQD Facility ID No.:
Facility Name: Williams Roller Mill and Burner (11 MM Btu) (comb.)
Emission Unit Identification No.: EQUI6
Stack/Vent Designation No.: SV001/STRU16

Maximum Rated Boiler Capacity: 11.0 MMBtu/hr
Control Equipment:
Fuel Parameters:

| Fuel Type | Sulfur | % Ash | Heat Value | Maximum Fuel Consumption Rate |
|-------------|----------------|------------|--------------|-------------------------------|
| Natural Gas | 0.4 gr/100 scf | negligible | 1,020 Btu/cf | 0.0108 10 ⁶ cf/hr |

Calculations Summary - Primary Fuel : Natural Gas

| Pollutant | Emission Factor
(lb/MMBtu) | Emission Factor
(lb/10 ⁶ scf) | Emission Factor Source | Emission Rate
(lb/hr) | Maximum
Uncontrolled
Emissions (tpy) | Pollution Control
Efficiency (%) | Limited Controlled
Emissions (tpy) |
|--------------------------------|-------------------------------|---|---------------------------|--------------------------|--|-------------------------------------|---------------------------------------|
| PM | -- | 7.60 | AP-42 Table 1.4-2 | 0.08 | 0.36 | 0% | 0.36 |
| PM ₁₀ | -- | 7.60 | AP-42 Table 1.4-2 | 0.08 | 0.36 | 0% | 0.36 |
| PM _{2.5} | -- | 7.60 | AP-42 Table 1.4-2 | 0.08 | 0.36 | 0% | 0.36 |
| SO _x | -- | 0.60 | AP-42 Table 1.4-2 | 0.01 | 0.03 | 0% | 0.03 |
| NO _x | -- | 100.00 | AP-42 Table 1.4-1 | 1.08 | 4.72 | 0% | 4.72 |
| VOC | -- | 5.50 | AP-42 Table 1.4-2 | 0.06 | 0.26 | 0% | 0.26 |
| CO | -- | 84.00 | AP-42 Table 1.4-1 | 0.91 | 3.97 | 0% | 3.97 |
| Lead (Pb) (9439-92-1) | -- | 5.00E-04 | AP-42 Table 1.4-2 | 5.39E-06 | 2.36E-05 | 0% | 2.36E-05 |
| GHGs: | | | | | | | |
| CO ₂ | 116.98 | -- | 40 CFR Part 98, Subpart C | 1,287 | 5,636 | 0% | 5,636 |
| CH ₄ | 2.20E-03 | -- | 40 CFR Part 98, Subpart C | 2.43E-02 | 1.06E-01 | 0% | 1.06E-01 |
| N ₂ O | 2.20E-04 | -- | 40 CFR Part 98, Subpart C | 2.43E-03 | 1.06E-02 | 0% | 1.06E-02 |
| CO ₂ e | | -- | | 1,288 | 5,642 | 0% | 5,642 |
| HAPs: | | | | | | | |
| Arsenic (7440-38-2) | | 2.00E-04 | AP-42 Table 1.4-3 | 2.16E-06 | 9.45E-06 | 0% | 9.45E-06 |
| Benzene (71-43-2) | | 2.10E-03 | AP-42 Table 1.4-3 | 2.26E-05 | 9.92E-05 | 0% | 9.92E-05 |
| Beryllium (7440-41-7) | | 1.20E-05 | AP-42 Table 1.4-3 | 1.29E-07 | 5.67E-07 | 0% | 5.67E-07 |
| Cadmium (7440-43-9) | | 1.10E-03 | AP-42 Table 1.4-3 | 1.19E-05 | 5.20E-05 | 0% | 5.20E-05 |
| Chromium (7440-47-3) | | 1.40E-03 | AP-42 Table 1.4-3 | 1.51E-05 | 6.61E-05 | 0% | 6.61E-05 |
| Cobalt (7440-48-4) | | 8.40E-05 | AP-42 Table 1.4-3 | 9.06E-07 | 3.97E-06 | 0% | 3.97E-06 |
| 1,4-Dichlorobenzene (106-46-7) | | 1.20E-03 | AP-42 Table 1.4-3 | 1.29E-05 | 5.67E-05 | 0% | 5.67E-05 |
| Ethylbenzene (100-41-4) | | N/A | -- | -- | -- | | -- |
| Formaldehyde (50-00-0) | | 7.50E-02 | AP-42 Table 1.4-3 | 8.09E-04 | 3.54E-03 | 0% | 3.54E-03 |
| Hexane (110-54-3) | | 1.80E+00 | AP-42 Table 1.4-3 | 1.94E-02 | 8.50E-02 | 0% | 8.50E-02 |
| Manganese (7439-96-5) | | 3.80E-04 | AP-42 Table 1.4-3 | 4.10E-06 | 1.79E-05 | 0% | 1.79E-05 |
| Mercury (7439-97-6) | | 2.60E-04 | AP-42 Table 1.4-3 | 2.80E-06 | 1.23E-05 | 0% | 1.23E-05 |
| Naphthalene (91-20-3) | | 6.10E-04 | AP-42 Table 1.4-3 | 6.58E-06 | 2.88E-05 | 0% | 2.88E-05 |
| Nickel (7440-02-0) | | 2.10E-03 | AP-42 Table 1.4-3 | 2.26E-05 | 9.92E-05 | 0% | 9.92E-05 |
| POM/PAH (w/Naphthalene) | | 6.98E-04 | AP-42 Table 1.4-3 | 7.53E-06 | 3.30E-05 | 0% | 3.30E-05 |
| Selenium (7782-49-2) | | 2.40E-05 | AP-42 Table 1.4-3 | 2.59E-07 | 1.13E-06 | 0% | 1.13E-06 |
| Toluene (108-88-3) | | 3.40E-03 | AP-42 Table 1.4-3 | 3.67E-05 | 1.61E-04 | 0% | 1.61E-04 |
| o-Xylene (95-47-6) | | N/A | -- | -- | -- | | -- |
| Total HAPs | | | | 0.02 | 0.09 | | 0.09 |

GHG EF from 40 CFR Part 98, Subpart C. CO₂e EF calculated based on Global Warming Potential (GWP) as follows:

| GHG Pollutant | GWP | Mass EF (kg/MMBtu) | Mass EF
(lb/MMBtu) | CO ₂ e EF
(lb/MMBtu) |
|-------------------|-----|--------------------|-----------------------|------------------------------------|
| CO ₂ | 1 | 53.06 | 116.98 | 116.98 |
| CH ₄ | 28 | 1.00E-03 | 2.20E-03 | 5.51E-02 |
| N ₂ O | 265 | 1.00E-04 | 2.20E-04 | 6.57E-02 |
| CO ₂ e | --- | --- | --- | 117.10 |

Conversion factor:
2.2046 lb/kg

Notes: (1) Naphthalene is counted separately and included in POM/PAH and has been subtracted from the total so as not to be double counted.

| POM Breakdown From AP-42 Table 1.4-3: | EF (lb/10⁶ scf) | EF (lb/10⁶ scf) |
|--|-----------------------------------|-----------------------------------|
| 2-Methylnaphthalene (91-57-6) | 2.40E-05 | 2.40E-05 |
| 3-Methylchloranthrene (56-49-5) | 1.80E-06 | 1.80E-06 |
| 7,12-Dimethylbenz(a)anthracene (57-97-6) | 1.60E-05 | 1.60E-05 |
| Acenaphthene (83-32-9) | 1.80E-06 | 1.80E-06 |
| Acenaphthylene (208-96-8) | 1.80E-06 | 1.80E-06 |
| Anthracene (120-12-7) | 2.40E-06 | 2.40E-06 |
| Benz(a)anthracene (56-55-3) | 1.80E-06 | 1.80E-06 |
| Benzo(a)pyrene (50-32-8) | 1.20E-06 | 1.20E-06 |
| Benzo(b)fluoranthene (205-99-2) | 1.80E-06 | 1.80E-06 |
| Benzo(g,h,i)perylene (191-24-2) | 1.20E-06 | 1.20E-06 |
| Benzo(k)fluoranthene (207-08-9) | 1.80E-06 | 1.80E-06 |
| Chrysene (218-01-9) | 1.80E-06 | 1.80E-06 |
| Dibenzo(a,h)anthracene (53-70-3) | 1.20E-06 | 1.20E-06 |
| Fluoranthene (206-44-0) | 3.00E-06 | 3.00E-06 |
| Fluorene (86-73-7) | 2.80E-06 | 2.80E-06 |
| Indeno(1,2,3-cd)pyrene (193-39-5) | 1.80E-06 | 1.80E-06 |
| Phenanathrene (85-01-8) | 1.70E-05 | 1.70E-05 |
| Pyrene (129-00-0) | 5.00E-06 | 5.00E-06 |
| Naphthalene (91-20-3) | 6.10E-04 | 6.10E-04 |
| Total POM/PAH (w/Naphthalene) | 6.98E-04 | 6.98E-04 |
| Total POM/PAH (w/out Naphthalene) | 8.82E-05 | 8.82E-05 |

AP-42 has CAS # wrong

AP-42 has CAS # wrong

Superior Minerals Company
Combustion Emission Calculations

AQD Facility ID No.:
Facility Name: Ultrafine Classifier and Heater (2 MM Btu) (comb.)
Emission Unit Identification No.: EQUI36
Stack/Vent Designation No.: SV017/STRU4

Maximum Rated Boiler Capacity: 2.0 MMBtu/hr
Control Equipment:
Fuel Parameters:

| Fuel Type | Sulfur | % Ash | Heat Value | Maximum Fuel Consumption Rate |
|-------------|----------------|------------|--------------|-------------------------------|
| Natural Gas | 0.4 gr/100 scf | negligible | 1,020 Btu/cf | 0.0020 10 ⁶ cf/hr |

Calculations Summary - Primary Fuel : Natural Gas

| Pollutant | Emission Factor (lb/MMBtu) | Emission Factor (lb/10 ⁶ scf) | Emission Factor Source | Emission Rate (lb/hr) | Maximum Uncontrolled Emissions (tpy) | Pollution Control Efficiency (%) | Limited Controlled Emissions (tpy) |
|--------------------------------|----------------------------|--|---------------------------|-----------------------|--------------------------------------|----------------------------------|------------------------------------|
| PM | -- | 7.60 | AP-42 Table 1.4-2 | 0.01 | 0.07 | 0% | 0.07 |
| PM ₁₀ | -- | 7.60 | AP-42 Table 1.4-2 | 0.01 | 0.07 | 0% | 0.07 |
| PM _{2.5} | -- | 7.60 | AP-42 Table 1.4-2 | 0.01 | 0.07 | 0% | 0.07 |
| SO _x | -- | 0.60 | AP-42 Table 1.4-2 | 0.00 | 0.01 | 0% | 0.01 |
| NO _x | -- | 100.00 | AP-42 Table 1.4-1 | 0.20 | 0.86 | 0% | 0.86 |
| VOC | -- | 5.50 | AP-42 Table 1.4-2 | 0.01 | 0.05 | 0% | 0.05 |
| CO | -- | 84.00 | AP-42 Table 1.4-1 | 0.16 | 0.72 | 0% | 0.72 |
| Lead (Pb) (9439-92-1) | -- | 5.00E-04 | AP-42 Table 1.4-2 | 9.80E-07 | 4.29E-06 | 0% | 4.29E-06 |
| GHGs: | | | | | | | |
| CO ₂ | 116.98 | -- | 40 CFR Part 98, Subpart C | 234 | 1,025 | 0% | 1,025 |
| CH ₄ | 2.20E-03 | -- | 40 CFR Part 98, Subpart C | 4.41E-03 | 1.93E-02 | 0% | 1.93E-02 |
| N ₂ O | 2.20E-04 | -- | 40 CFR Part 98, Subpart C | 4.41E-04 | 1.93E-03 | 0% | 1.93E-03 |
| CO ₂ e | | -- | | 234 | 1,026 | 0% | 1,026 |
| HAPs: | | | | | | | |
| Arsenic (7440-38-2) | | 2.00E-04 | AP-42 Table 1.4-3 | 3.92E-07 | 1.72E-06 | 0% | 1.72E-06 |
| Benzene (71-43-2) | | 2.10E-03 | AP-42 Table 1.4-3 | 4.12E-06 | 1.80E-05 | 0% | 1.80E-05 |
| Beryllium (7440-41-7) | | 1.20E-05 | AP-42 Table 1.4-3 | 2.35E-08 | 1.03E-07 | 0% | 1.03E-07 |
| Cadmium (7440-43-9) | | 1.10E-03 | AP-42 Table 1.4-3 | 2.16E-06 | 9.45E-06 | 0% | 9.45E-06 |
| Chromium (7440-47-3) | | 1.40E-03 | AP-42 Table 1.4-3 | 2.75E-06 | 1.20E-05 | 0% | 1.20E-05 |
| Cobalt (7440-48-4) | | 8.40E-05 | AP-42 Table 1.4-3 | 1.65E-07 | 7.21E-07 | 0% | 7.21E-07 |
| 1,4-Dichlorobenzene (106-46-7) | | 1.20E-03 | AP-42 Table 1.4-3 | 2.35E-06 | 1.03E-05 | 0% | 1.03E-05 |
| Ethylbenzene (100-41-4) | | N/A | -- | -- | -- | | -- |
| Formaldehyde (50-00-0) | | 7.50E-02 | AP-42 Table 1.4-3 | 1.47E-04 | 6.44E-04 | 0% | 6.44E-04 |
| Hexane (110-54-3) | | 1.80E+00 | AP-42 Table 1.4-3 | 3.53E-03 | 1.55E-02 | 0% | 1.55E-02 |
| Manganese (7439-96-5) | | 3.80E-04 | AP-42 Table 1.4-3 | 7.45E-07 | 3.26E-06 | 0% | 3.26E-06 |
| Mercury (7439-97-6) | | 2.60E-04 | AP-42 Table 1.4-3 | 5.10E-07 | 2.23E-06 | 0% | 2.23E-06 |
| Naphthalene (91-20-3) | | 6.10E-04 | AP-42 Table 1.4-3 | 1.20E-06 | 5.24E-06 | 0% | 5.24E-06 |
| Nickel (7440-02-0) | | 2.10E-03 | AP-42 Table 1.4-3 | 4.12E-06 | 1.80E-05 | 0% | 1.80E-05 |
| POM/PAH (w/Naphthalene) | | 6.98E-04 | AP-42 Table 1.4-3 | 1.37E-06 | 6.00E-06 | 0% | 6.00E-06 |
| Selenium (7782-49-2) | | 2.40E-05 | AP-42 Table 1.4-3 | 4.71E-08 | 2.06E-07 | 0% | 2.06E-07 |
| Toluene (108-88-3) | | 3.40E-03 | AP-42 Table 1.4-3 | 6.67E-06 | 2.92E-05 | 0% | 2.92E-05 |
| o-Xylene (95-47-6) | | N/A | -- | -- | -- | | -- |
| Total HAPs | | | | 0.00 | 0.02 | | 0.02 |

GHG EF from 40 CFR Part 98, Subpart C. CO₂e EF calculated based on Global Warming Potential (GWP) as follows:

| GHG Pollutant | GWP | Mass EF (kg/MMBtu) | Mass EF (lb/MMBtu) | CO ₂ e EF (lb/MMBtu) |
|-------------------|-----|--------------------|--------------------|---------------------------------|
| CO ₂ | 1 | 53.06 | 116.98 | 116.98 |
| CH ₄ | 28 | 1.00E-03 | 2.20E-03 | 5.51E-02 |
| N ₂ O | 265 | 1.00E-04 | 2.20E-04 | 6.57E-02 |
| CO ₂ e | --- | --- | --- | 117.10 |

Conversion factor:
2.2046 lb/kg

Notes: (1) Naphthalene is counted separately and included in POM/PAH and has been subtracted from the total so as not to be double counted.

| POM Breakdown From AP-42 Table 1.4-3: | EF (lb/10⁶ scf) | EF (lb/10⁶ scf) |
|--|-----------------------------------|-----------------------------------|
| 2-Methylnaphthalene (91-57-6) | 2.40E-05 | 2.40E-05 |
| 3-Methylchloranthrene (56-49-5) | 1.80E-06 | 1.80E-06 |
| 7,12-Dimethylbenz(a)anthracene (57-97-6) | 1.60E-05 | 1.60E-05 |
| Acenaphthene (83-32-9) | 1.80E-06 | 1.80E-06 |
| Acenaphthylene (208-96-8) | 1.80E-06 | 1.80E-06 |
| Anthracene (120-12-7) | 2.40E-06 | 2.40E-06 |
| Benz(a)anthracene (56-55-3) | 1.80E-06 | 1.80E-06 |
| Benzo(a)pyrene (50-32-8) | 1.20E-06 | 1.20E-06 |
| Benzo(b)fluoranthene (205-99-2) | 1.80E-06 | 1.80E-06 |
| Benzo(g,h,i)perylene (191-24-2) | 1.20E-06 | 1.20E-06 |
| Benzo(k)fluoranthene (207-08-9) | 1.80E-06 | 1.80E-06 |
| Chrysene (218-01-9) | 1.80E-06 | 1.80E-06 |
| Dibenzo(a,h)anthracene (53-70-3) | 1.20E-06 | 1.20E-06 |
| Fluoranthene (206-44-0) | 3.00E-06 | 3.00E-06 |
| Fluorene (86-73-7) | 2.80E-06 | 2.80E-06 |
| Indeno(1,2,3-cd)pyrene (193-39-5) | 1.80E-06 | 1.80E-06 |
| Phenanathrene (85-01-8) | 1.70E-05 | 1.70E-05 |
| Pyrene (129-00-0) | 5.00E-06 | 5.00E-06 |
| Naphthalene (91-20-3) | 6.10E-04 | 6.10E-04 |
| Total POM/PAH (w/Naphthalene) | 6.98E-04 | 6.98E-04 |
| Total POM/PAH (w/out Naphthalene) | 8.82E-05 | 8.82E-05 |

AP-42 has CAS # wrong

AP-42 has CAS # wrong

Superior Minerals Company
Combustion Emission Calculations

AQD Facility ID No.:
Facility Name: Raymond Roller Mill and Heater (9 MM Btu) (comb.)
Emission Unit Identification No.: EQUI33
Stack/Vent Designation No.: SV016/STRU3

Maximum Rated Boiler Capacity: 9.0 MMBtu/hr
Control Equipment:
Fuel Parameters:

| Fuel Type | Sulfur | % Ash | Heat Value | Maximum Fuel Consumption Rate |
|-------------|----------------|------------|--------------|-------------------------------|
| Natural Gas | 0.4 gr/100 scf | negligible | 1,020 Btu/cf | 0.0088 10 ⁶ cf/hr |

Calculations Summary - Primary Fuel : Natural Gas

| Pollutant | Emission Factor (lb/MMBtu) | Emission Factor (lb/10 ⁶ scf) | Emission Factor Source | Emission Rate (lb/hr) | Maximum Uncontrolled Emissions (tpy) | Pollution Control Efficiency (%) | Limited Controlled Emissions (tpy) |
|--------------------------------|----------------------------|--|---------------------------|-----------------------|--------------------------------------|----------------------------------|------------------------------------|
| PM | -- | 7.60 | AP-42 Table 1.4-2 | 0.07 | 0.29 | 0% | 0.29 |
| PM ₁₀ | -- | 7.60 | AP-42 Table 1.4-2 | 0.07 | 0.29 | 0% | 0.29 |
| PM _{2.5} | -- | 7.60 | AP-42 Table 1.4-2 | 0.07 | 0.29 | 0% | 0.29 |
| SO _x | -- | 0.60 | AP-42 Table 1.4-2 | 0.01 | 0.02 | 0% | 0.02 |
| NO _x | -- | 100.00 | AP-42 Table 1.4-1 | 0.88 | 3.86 | 0% | 3.86 |
| VOC | -- | 5.50 | AP-42 Table 1.4-2 | 0.05 | 0.21 | 0% | 0.21 |
| CO | -- | 84.00 | AP-42 Table 1.4-1 | 0.74 | 3.25 | 0% | 3.25 |
| Lead (Pb) (9439-92-1) | -- | 5.00E-04 | AP-42 Table 1.4-2 | 4.41E-06 | 1.93E-05 | 0% | 1.93E-05 |
| GHGs: | | | | | | | |
| CO ₂ | 116.98 | -- | 40 CFR Part 98, Subpart C | 1,053 | 4,611 | 0% | 4,611 |
| CH ₄ | 2.20E-03 | -- | 40 CFR Part 98, Subpart C | 1.98.E-02 | 8.69E-02 | 0% | 8.69E-02 |
| N ₂ O | 2.20E-04 | -- | 40 CFR Part 98, Subpart C | 1.98.E-03 | 8.69E-03 | 0% | 8.69E-03 |
| CO ₂ e | | -- | | 1,054 | 4,616 | 0% | 4,616 |
| HAPs: | | | | | | | |
| Arsenic (7440-38-2) | | 2.00E-04 | AP-42 Table 1.4-3 | 1.76E-06 | 7.73E-06 | 0% | 7.73E-06 |
| Benzene (71-43-2) | | 2.10E-03 | AP-42 Table 1.4-3 | 1.85E-05 | 8.12E-05 | 0% | 8.12E-05 |
| Beryllium (7440-41-7) | | 1.20E-05 | AP-42 Table 1.4-3 | 1.06E-07 | 4.64E-07 | 0% | 4.64E-07 |
| Cadmium (7440-43-9) | | 1.10E-03 | AP-42 Table 1.4-3 | 9.71E-06 | 4.25E-05 | 0% | 4.25E-05 |
| Chromium (7440-47-3) | | 1.40E-03 | AP-42 Table 1.4-3 | 1.24E-05 | 5.41E-05 | 0% | 5.41E-05 |
| Cobalt (7440-48-4) | | 8.40E-05 | AP-42 Table 1.4-3 | 7.41E-07 | 3.25E-06 | 0% | 3.25E-06 |
| 1,4-Dichlorobenzene (106-46-7) | | 1.20E-03 | AP-42 Table 1.4-3 | 1.06E-05 | 4.64E-05 | 0% | 4.64E-05 |
| Ethylbenzene (100-41-4) | | N/A | -- | -- | -- | | -- |
| Formaldehyde (50-00-0) | | 7.50E-02 | AP-42 Table 1.4-3 | 6.62E-04 | 2.90E-03 | 0% | 2.90E-03 |
| Hexane (110-54-3) | | 1.80E+00 | AP-42 Table 1.4-3 | 1.59E-02 | 6.96E-02 | 0% | 6.96E-02 |
| Manganese (7439-96-5) | | 3.80E-04 | AP-42 Table 1.4-3 | 3.35E-06 | 1.47E-05 | 0% | 1.47E-05 |
| Mercury (7439-97-6) | | 2.60E-04 | AP-42 Table 1.4-3 | 2.29E-06 | 1.00E-05 | 0% | 1.00E-05 |
| Naphthalene (91-20-3) | | 6.10E-04 | AP-42 Table 1.4-3 | 5.38E-06 | 2.36E-05 | 0% | 2.36E-05 |
| Nickel (7440-02-0) | | 2.10E-03 | AP-42 Table 1.4-3 | 1.85E-05 | 8.12E-05 | 0% | 8.12E-05 |
| POM/PAH (w/Naphthalene) | | 6.98E-04 | AP-42 Table 1.4-3 | 6.16E-06 | 2.70E-05 | 0% | 2.70E-05 |
| Selenium (7782-49-2) | | 2.40E-05 | AP-42 Table 1.4-3 | 2.12E-07 | 9.28E-07 | 0% | 9.28E-07 |
| Toluene (108-88-3) | | 3.40E-03 | AP-42 Table 1.4-3 | 3.00E-05 | 1.31E-04 | 0% | 1.31E-04 |
| o-Xylene (95-47-6) | | N/A | -- | -- | -- | | -- |
| Total HAPs | | | | 0.02 | 0.07 | | 0.07 |

GHG EF from 40 CFR Part 98, Subpart C. CO₂e EF calculated based on Global Warming Potential (GWP) as follows:

| GHG Pollutant | GWP | Mass EF (kg/MMBtu) | Mass EF (lb/MMBtu) | CO ₂ e EF (lb/MMBtu) |
|-------------------|-----|--------------------|--------------------|---------------------------------|
| CO ₂ | 1 | 53.06 | 116.98 | 116.98 |
| CH ₄ | 28 | 1.00E-03 | 2.20E-03 | 5.51E-02 |
| N ₂ O | 265 | 1.00E-04 | 2.20E-04 | 6.57E-02 |
| CO ₂ e | --- | --- | --- | 117.10 |

Conversion factor:
2.2046 lb/kg

Notes: (1) Naphthalene is counted separately and included in POM/PAH and has been subtracted from the total so as not to be double counted.

| POM Breakdown From AP-42 Table 1.4-3: | EF (lb/10⁶ scf) | EF (lb/10⁶ scf) |
|--|-----------------------------------|-----------------------------------|
| 2-Methylnaphthalene (91-57-6) | 2.40E-05 | 2.40E-05 |
| 3-Methylchloranthrene (56-49-5) | 1.80E-06 | 1.80E-06 |
| 7,12-Dimethylbenz(a)anthracene (57-97-6) | 1.60E-05 | 1.60E-05 |
| Acenaphthene (83-32-9) | 1.80E-06 | 1.80E-06 |
| Acenaphthylene (208-96-8) | 1.80E-06 | 1.80E-06 |
| Anthracene (120-12-7) | 2.40E-06 | 2.40E-06 |
| Benz(a)anthracene (56-55-3) | 1.80E-06 | 1.80E-06 |
| Benzo(a)pyrene (50-32-8) | 1.20E-06 | 1.20E-06 |
| Benzo(b)fluoranthene (205-99-2) | 1.80E-06 | 1.80E-06 |
| Benzo(g,h,i)perylene (191-24-2) | 1.20E-06 | 1.20E-06 |
| Benzo(k)fluoranthene (207-08-9) | 1.80E-06 | 1.80E-06 |
| Chrysene (218-01-9) | 1.80E-06 | 1.80E-06 |
| Dibenzo(a,h)anthracene (53-70-3) | 1.20E-06 | 1.20E-06 |
| Fluoranthene (206-44-0) | 3.00E-06 | 3.00E-06 |
| Fluorene (86-73-7) | 2.80E-06 | 2.80E-06 |
| Indeno(1,2,3-cd)pyrene (193-39-5) | 1.80E-06 | 1.80E-06 |
| Phenanathrene (85-01-8) | 1.70E-05 | 1.70E-05 |
| Pyrene (129-00-0) | 5.00E-06 | 5.00E-06 |
| Naphthalene (91-20-3) | 6.10E-04 | 6.10E-04 |
| Total POM/PAH (w/Naphthalene) | 6.98E-04 | 6.98E-04 |
| Total POM/PAH (w/out Naphthalene) | 8.82E-05 | 8.82E-05 |

AP-42 has CAS # wrong

AP-42 has CAS # wrong

Superior Minerals Company
Combustion Emission Calculations

AQD Facility ID No.:
Facility Name: Lehigh Dryer (17 MM Btu) (comb.)
Emission Unit Identification No.: EQUI41
Stack/Vent Designation No.: SV023/STRU10

Maximum Rated Boiler Capacity: 17.0 MMBtu/hr
Control Equipment:
Fuel Parameters:

| Fuel Type | Sulfur | % Ash | Heat Value | Maximum Fuel Consumption Rate |
|-------------|----------------|------------|--------------|-------------------------------|
| Natural Gas | 0.4 gr/100 scf | negligible | 1,020 Btu/cf | 0.0167 10 ⁶ cf/hr |

Calculations Summary - Primary Fuel : Natural Gas

| Pollutant | Emission Factor (lb/MMBtu) | Emission Factor (lb/10 ⁶ scf) | Emission Factor Source | Emission Rate (lb/hr) | Maximum Uncontrolled Emissions (tpy) | Pollution Control Efficiency (%) | Limited Controlled Emissions (tpy) |
|--------------------------------|----------------------------|--|---------------------------|-----------------------|--------------------------------------|----------------------------------|------------------------------------|
| PM | -- | 7.60 | AP-42 Table 1.4-2 | 0.13 | 0.55 | 0% | 0.55 |
| PM ₁₀ | -- | 7.60 | AP-42 Table 1.4-2 | 0.13 | 0.55 | 0% | 0.55 |
| PM _{2.5} | -- | 7.60 | AP-42 Table 1.4-2 | 0.13 | 0.55 | 0% | 0.55 |
| SO _x | -- | 0.60 | AP-42 Table 1.4-2 | 0.01 | 0.04 | 0% | 0.04 |
| NO _x | -- | 100.00 | AP-42 Table 1.4-1 | 1.67 | 7.30 | 0% | 7.30 |
| VOC | -- | 5.50 | AP-42 Table 1.4-2 | 0.09 | 0.40 | 0% | 0.40 |
| CO | -- | 84.00 | AP-42 Table 1.4-1 | 1.40 | 6.13 | 0% | 6.13 |
| Lead (Pb) (9439-92-1) | -- | 5.00E-04 | AP-42 Table 1.4-2 | 8.33E-06 | 3.65E-05 | 0% | 3.65E-05 |
| GHGs: | | | | | | | |
| CO ₂ | 116.98 | -- | 40 CFR Part 98, Subpart C | 1,989 | 8,710 | 0% | 8,710 |
| CH ₄ | 2.20E-03 | -- | 40 CFR Part 98, Subpart C | 3.75E-02 | 1.64E-01 | 0% | 1.64E-01 |
| N ₂ O | 2.20E-04 | -- | 40 CFR Part 98, Subpart C | 3.75E-03 | 1.64E-02 | 0% | 1.64E-02 |
| CO ₂ e | | -- | | 1,991 | 8,719 | 0% | 8,719 |
| HAPs: | | | | | | | |
| Arsenic (7440-38-2) | | 2.00E-04 | AP-42 Table 1.4-3 | 3.33E-06 | 1.46E-05 | 0% | 1.46E-05 |
| Benzene (71-43-2) | | 2.10E-03 | AP-42 Table 1.4-3 | 3.50E-05 | 1.53E-04 | 0% | 1.53E-04 |
| Beryllium (7440-41-7) | | 1.20E-05 | AP-42 Table 1.4-3 | 2.00E-07 | 8.76E-07 | 0% | 8.76E-07 |
| Cadmium (7440-43-9) | | 1.10E-03 | AP-42 Table 1.4-3 | 1.83E-05 | 8.03E-05 | 0% | 8.03E-05 |
| Chromium (7440-47-3) | | 1.40E-03 | AP-42 Table 1.4-3 | 2.33E-05 | 1.02E-04 | 0% | 1.02E-04 |
| Cobalt (7440-48-4) | | 8.40E-05 | AP-42 Table 1.4-3 | 1.40E-06 | 6.13E-06 | 0% | 6.13E-06 |
| 1,4-Dichlorobenzene (106-46-7) | | 1.20E-03 | AP-42 Table 1.4-3 | 2.00E-05 | 8.76E-05 | 0% | 8.76E-05 |
| Ethylbenzene (100-41-4) | | N/A | -- | -- | -- | | -- |
| Formaldehyde (50-00-0) | | 7.50E-02 | AP-42 Table 1.4-3 | 1.25E-03 | 5.48E-03 | 0% | 5.48E-03 |
| Hexane (110-54-3) | | 1.80E+00 | AP-42 Table 1.4-3 | 3.00E-02 | 1.31E-01 | 0% | 1.31E-01 |
| Manganese (7439-96-5) | | 3.80E-04 | AP-42 Table 1.4-3 | 6.33E-06 | 2.77E-05 | 0% | 2.77E-05 |
| Mercury (7439-97-6) | | 2.60E-04 | AP-42 Table 1.4-3 | 4.33E-06 | 1.90E-05 | 0% | 1.90E-05 |
| Naphthalene (91-20-3) | | 6.10E-04 | AP-42 Table 1.4-3 | 1.02E-05 | 4.45E-05 | 0% | 4.45E-05 |
| Nickel (7440-02-0) | | 2.10E-03 | AP-42 Table 1.4-3 | 3.50E-05 | 1.53E-04 | 0% | 1.53E-04 |
| POM/PAH (w/Naphthalene) | | 6.98E-04 | AP-42 Table 1.4-3 | 1.16E-05 | 5.10E-05 | 0% | 5.10E-05 |
| Selenium (7782-49-2) | | 2.40E-05 | AP-42 Table 1.4-3 | 4.00E-07 | 1.75E-06 | 0% | 1.75E-06 |
| Toluene (108-88-3) | | 3.40E-03 | AP-42 Table 1.4-3 | 5.67E-05 | 2.48E-04 | 0% | 2.48E-04 |
| o-Xylene (95-47-6) | | N/A | -- | -- | -- | | -- |
| Total HAPs | | | | 0.03 | 0.14 | | 0.14 |

GHG EF from 40 CFR Part 98, Subpart C. CO₂e EF calculated based on Global Warming Potential (GWP) as follows:

| GHG Pollutant | GWP | Mass EF (kg/MMBtu) | Mass EF (lb/MMBtu) | CO ₂ e EF (lb/MMBtu) |
|-------------------|-----|--------------------|--------------------|---------------------------------|
| CO ₂ | 1 | 53.06 | 116.98 | 116.98 |
| CH ₄ | 28 | 1.00E-03 | 2.20E-03 | 5.51E-02 |
| N ₂ O | 265 | 1.00E-04 | 2.20E-04 | 6.57E-02 |
| CO ₂ e | --- | --- | --- | 117.10 |

Conversion factor:
2.2046 lb/kg

Notes: (1) Naphthalene is counted separately and included in POM/PAH and has been subtracted from the total so as not to be double counted.

| POM Breakdown From AP-42 Table 1.4-3: | EF (lb/10⁶ scf) | EF (lb/10⁶ scf) |
|--|-----------------------------------|-----------------------------------|
| 2-Methylnaphthalene (91-57-6) | 2.40E-05 | 2.40E-05 |
| 3-Methylchloranthrene (56-49-5) | 1.80E-06 | 1.80E-06 |
| 7,12-Dimethylbenz(a)anthracene (57-97-6) | 1.60E-05 | 1.60E-05 |
| Acenaphthene (83-32-9) | 1.80E-06 | 1.80E-06 |
| Acenaphthylene (208-96-8) | 1.80E-06 | 1.80E-06 |
| Anthracene (120-12-7) | 2.40E-06 | 2.40E-06 |
| Benz(a)anthracene (56-55-3) | 1.80E-06 | 1.80E-06 |
| Benzo(a)pyrene (50-32-8) | 1.20E-06 | 1.20E-06 |
| Benzo(b)fluoranthene (205-99-2) | 1.80E-06 | 1.80E-06 |
| Benzo(g,h,i)perylene (191-24-2) | 1.20E-06 | 1.20E-06 |
| Benzo(k)fluoranthene (207-08-9) | 1.80E-06 | 1.80E-06 |
| Chrysene (218-01-9) | 1.80E-06 | 1.80E-06 |
| Dibenzo(a,h)anthracene (53-70-3) | 1.20E-06 | 1.20E-06 |
| Fluoranthene (206-44-0) | 3.00E-06 | 3.00E-06 |
| Fluorene (86-73-7) | 2.80E-06 | 2.80E-06 |
| Indeno(1,2,3-cd)pyrene (193-39-5) | 1.80E-06 | 1.80E-06 |
| Phenanathrene (85-01-8) | 1.70E-05 | 1.70E-05 |
| Pyrene (129-00-0) | 5.00E-06 | 5.00E-06 |
| Naphthalene (91-20-3) | 6.10E-04 | 6.10E-04 |
| Total POM/PAH (w/Naphthalene) | 6.98E-04 | 6.98E-04 |
| Total POM/PAH (w/out Naphthalene) | 8.82E-05 | 8.82E-05 |

AP-42 has CAS # wrong

AP-42 has CAS # wrong

Superior Minerals Company
Emission Calculations - Pet Coke Storage Project
Paved On-Site Roads - Pet Coke to Unloading Area

C:\Users\thanafy\Downloads\[Superior Minerals Calc 10 30 2025(3).xlsx]Pet Coke Paved Haul Road

E = k * [(sL)^0.91 * (W)^1.02]/(1-1.2P/N))

where:
E = Controlled emission factor (lb/VMT, vehicle miles traveled), AP-42, Section 13.2.1, Equation 1, Dec 2003.
k = Particle size multiplier (lb/vmt), AP-42, Table 13.2.1-1
sL = Road surface silt loading (g/m²), Table 13.2.1-3, Based on Quarry Mean value
W = Mean vehicle weight (ton)
P = Number of Wet Days, Dbtained from MSP meteorological data from 2012-2016
N = Number of Days in Averaging Period
c = Control Efficiency

Fugitive Dust Emission Factor Calculations for PM, PM10, PM2.5 Emissions from Paved Roads:

| Fug Unit # | Activity | PM Particle Size Multiplier, k (lb/VMT) | PM10 Particle Size Multiplier, k (lb/VMT) | PM2.5 Particle Size Multiplier, k (lb/VMT) | Silt Loading (g/m2) | Mean Vehicle Weight, W (tons) | Precipitation Days, p (days) | Uncontrolled PM Emission Factor, E (lb/VMT) | Uncontrolled PM10 Emission Factor, E (lb/VMT) | Uncontrolled PM2.5 Emission Factor, E (lb/VMT) | Control Efficiency ¹ (%) |
|------------|---|---|---|--|---------------------|-------------------------------|------------------------------|---|---|--|-------------------------------------|
| FUGI87 | Paved Road - Pet Coke to Unloading Area (Empty) | 0.011 | 0.0022 | 0.00054 | 8.20 | 15 | 123 | 0.70 | 0.14 | 0.035 | 75% |
| FUGI87 | Paved Road - Pet Coke to Unloading Area (Full) | 0.011 | 0.0022 | 0.00054 | 8.20 | 40 | 123 | 1.91 | 0.38 | 0.094 | 75% |

Fugitive Dust Calculations for PM, PM10, PM2.5 Emissions from Paved Roads:

| Road Segment | | Controlled PM Factor, E (lb/VMT) | Controlled PM10 Factor, E (lb/VMT) | Controlled PM2.5 Factor, E (lb/VMT) | Maximum Hourly Trips/hr | Limited Annual Trips/yr | Feet per Trip | Vehicle Miles Traveled (VMT/hr) | Vehicle Miles Traveled (VMT/yr) | Controlled Unlimited PM Emissions | |
|--------------|---|----------------------------------|------------------------------------|-------------------------------------|-------------------------|-------------------------|---------------|---------------------------------|---------------------------------|-----------------------------------|------------------|
| | | | | | | | | | | Hourly (lb/hr) | Annual (tons/yr) |
| FUGI87 | Paved Road - Pet Coke to Unloading Area (Empty) | 0.176 | 0.035 | 0.009 | 20 | 16000 | 700 | 2.65 | 2121.21 | 0.47 | 2.04 |
| FUGI87 | Paved Road - Pet Coke to Unloading Area (Full) | 0.479 | 0.096 | 0.023 | 20 | 16000 | 690 | 2.61 | 2090.91 | 1.25 | 5.48 |
| TOTAL = | | | | | | | | | | 1.72 | 7.52 |

¹ 75% control efficiency was assumed for the project as described in the approved facility Fugitive Dust Control Plan.

² Annual emissions are based on a maximum of 400,000 tons per year.

110
315
265
690

| Controlled PM
Factor, E
(lb/VMT) | Controlled PM10
Factor, E
(lb/VMT) | Controlled PM2.5
Factor, E
(lb/VMT) |
|--|--|---|
| 0.176 | 0.035 | 0.009 |
| 0.479 | 0.096 | 0.023 |

| Controlled Unlimited PM10 Emissions | | Controlled Unlimited PM2.5 Emissions | | Controlled Limited Emissions Annual (tons/year) ¹² | | | Material Handling Check: | | | | Maximum Bottlenecked Annual |
|-------------------------------------|---------------------|--------------------------------------|---------------------|---|-------------------|--------------------|--------------------------|----------|---------|-----------|-----------------------------|
| Hourly
(lb/hr) | Annual
(tons/yr) | Hourly
(lb/hr) | Annual
(tons/yr) | PM
(tons/yr) | PM10
(tons/yr) | PM2.5
(tons/yr) | tons/trip | trips/hr | tons/hr | tons/yr | |
| 0.09 | 0.41 | 0.023 | 0.10 | 0.19 | 0.04 | 0.01 | | | | | |
| 0.25 | 1.10 | 0.061 | 0.27 | 0.50 | 0.10 | 0.02 | 25 | 20 | 500 | 4,380,000 | 400,000 |
| 0.34 | 1.50 | 0.08 | 0.37 | 0.69 | 0.14 | 0.03 | | | | | |

Superior Minerals Company
Emission Calculations - Pet Coke Storage Project
Paved On-Site Roads - Loader Road

C:\Users\thanafy\Downloads\[Superior Minerals Calc 10 30 2025(3).xlsx]Pet Coke Paved Haul Road Loader

$$E = k * [(sL)^{0.91} * (W)^{1.02}](1-1.2P/N)$$

- where:
- E = Controlled emission factor (lb/VMT, vehicle miles traveled), AP-42, Section 13.2.1, Equation 1, Dec 2003.
 - k = Particle size multiplier (lb/vmt), AP-42, Table 13.2.1-1
 - sL = Road surface silt loading (g/m²), Table 13.2.1-3, Based on Quarry Mean value
 - W = Mean vehicle weight (ton)
 - P = Number of Wet Days, Dbtained from MSP meteorological data from 2012-2016
 - N = Number of Days in Averaging Period
 - c = Control Efficiency

Fugitive Dust Emission Factor Calculations for PM, PM10, PM2.5 Emissions from Paved Roads:

| Fug Unit # | Activity | PM Particle Size Multiplier, k (lb/VMT) | PM10 Particle Size Multiplier, k (lb/VMT) | PM2.5 Particle Size Multiplier, k (lb/VMT) | Silt Loading (g/m2) | Mean Vehicle Weight, W ³ (tons) | Precipitation Days, p (days) | Uncontrolled PM Emission Factor, E (lb/VMT) | Uncontrolled PM10 Emission Factor, E (lb/VMT) | Uncontrolled PM2.5 Emission Factor, E (lb/VMT) |
|------------|--------------------------------------|---|---|--|---------------------|--|------------------------------|---|---|--|
| FUGI88 | Paved Road - Pet Coke Loader (Empty) | 0.011 | 0.0022 | 0.00054 | 8.20 | 20 | 123 | 0.94 | 0.19 | 0.046 |
| FUGI88 | Paved Road - Pet Coke Loader (Full) | 0.011 | 0.0022 | 0.00054 | 8.20 | 26 | 123 | 1.23 | 0.25 | 0.061 |

Fugitive Dust Calculations for PM, PM10, PM2.5 Emissions from Paved Roads:

| Road Segment | Controlled PM Factor, E (lb/VMT) | Controlled PM10 Factor, E (lb/VMT) | Controlled PM2.5 Factor, E (lb/VMT) | Maximum Hourly Trips/hr | Limited Annual Trips/yr | Feet per Trip | Vehicle Miles Traveled (VMT/hr) | Vehicle Miles Traveled (VMT/yr) | Controlled PM | |
|--------------|--------------------------------------|------------------------------------|-------------------------------------|-------------------------|-------------------------|---------------|---------------------------------|---------------------------------|----------------|------|
| | | | | | | | | | Hourly (lb/hr) | |
| FUGI88 | Paved Road - Pet Coke Loader (Empty) | 0.236 | 0.047 | 0.012 | 120 | 66,667 | 20 | 0.45 | 252.53 | 0.11 |
| FUGI88 | Paved Road - Pet Coke Loader (Full) | 0.308 | 0.062 | 0.015 | 120 | 66,667 | 20 | 0.45 | 252.53 | 0.14 |
| | | TOTAL = | | | | | | | 0.25 | |

¹ 75% control efficiency was assumed for the project as described in the approved facility Fugitive Dust Control Plan.

² Annual emissions are based on a maximum of 400,000 tons per year.

³ The loader bucket can hold 6 tons. Based on site specific loader located at Superior Minerals.

| Control Efficiency ¹
(%) | Controlled PM
Factor, E
(lb/VMT) | Controlled PM10
Factor, E
(lb/VMT) | Controlled PM2.5
Factor, E
(lb/VMT) |
|--|--|--|---|
| 75% | 0.236 | 0.047 | 0.012 |
| 75% | 0.308 | 0.062 | 0.015 |

| Emissions | Controlled PM10 Emissions | | Controlled PM2.5 Emissions | | Controlled Limited Emissions Annual (tons/year) ² | | | Maximum Bottlenecked Annual |
|------------------|---------------------------|------------------|----------------------------|------------------|--|----------------|-----------------|-----------------------------|
| Annual (tons/yr) | Hourly (lb/hr) | Annual (tons/yr) | Hourly (lb/hr) | Annual (tons/yr) | PM (tons/yr) | PM10 (tons/yr) | PM2.5 (tons/yr) | |
| 0.47 | 0.02 | 0.09 | 0.005 | 0.02 | 0.03 | 0.01 | 0.001 | |
| 0.61 | 0.03 | 0.12 | 0.007 | 0.03 | 0.04 | 0.01 | 0.002 | |
| 1.08 | 0.05 | 0.22 | 0.01 | 0.05 | 0.07 | 0.01 | 0.003 | 400,000 |

Superior Minerals Company
Emission Calculations - Pet Coke Storage Project
Fugitive Dust Emissions from Wind Erosion at Pile

EQUATIONS:

$$E = 1.7 * (s/1.5) * [(365-p) / 235] * (f/15)$$

where:

E = TSP emission factor (lb/day/acre) from AP-42 4th Edition, Section 11.2.3-5, Equation 3, (5/83).

s = silt content of aggregate (%)

p = number of days with greater than or equal to 0.25 mm (0.01 in.) of precipitation per year

f = percentage of time that the unobstructed wind speed exceeds 5.4 m/s (12 mph)

ASSUMPTIONS:

- TSP emission factor converted to PM₁₀ and PM_{2.5} based on particle size multipliers in AP-42, Section 13.2.5.

TSP multiplier = 1.0

PM₁₀ multiplier = 0.5

PM_{2.5} multiplier = 0.075

- Silt content based on AP-42 Section 13.2.4, Table 12.2.4-1, Average Silt for Coke Breeze

- An average number of days with precipitation greater than or equal to 0.25 mm based on precipitation data from 2012-2016 Minneapolis / St. Paul Intl. Airport observation station.

- The percent of time with wind speeds greater than 5.4 m/s based on wind data from the 2012-2016 Minneapolis / St. Paul Intl. Airport observation station.

- Total acres is based on pet coke storage pile capacity

MSP Meteorological Data Summary

| Data Set | Hourly Observations (number) | Wind Speed Greater Than 5.4 m/s | |
|-----------|------------------------------|---------------------------------|-------|
| | | (no. hours) | (%) |
| 2012-2016 | 43,848 | 12,755 | 14.77 |
| Total | 43,848 | 12,755 | 14.77 |

| Storage Pile | s (%) | p (no. days) | f (%) | TSP (lb/acre/day) | PM ₁₀ (lb/acre/day) | PM _{2.5} (lb/acre/day) | Pile Size (acres) |
|--------------------------------|-------|--------------|-------|-------------------|--------------------------------|---------------------------------|-------------------|
| FUGI89 - Pet Coke Storage Pile | 4.90 | 123 | 14.77 | 5.63 | 2.816 | 0.422 | 0.13 |

Emissions Totals

| Storage Pile | PM (lb/hr) | PM (tpy) | PM ₁₀ (lb/hr) | PM ₁₀ (tpy) | PM _{2.5} (lb/hr) | PM _{2.5} (tpy) |
|--------------------------------|------------|----------|--------------------------|------------------------|---------------------------|-------------------------|
| FUGI89 - Pet Coke Storage Pile | 0.03 | 0.13 | 0.02 | 0.07 | 0.002 | 0.01 |

Superior Minerals Company
Emission Calculations - Pet Coke Storage Project
Total Project Emissions

C:\Users\thanafy\AppData\Local\Microsoft\Windows\NetCache\Content.Outlook\HTIFCGCP\[Superior Minerals Calc 01 02 2026.xlsx]Pet Coke Project Emission
1/8/2026

HOURLY EMISSIONS

Controlled Hourly Emissions (lb/hr)

| | PM | PM10 | PM2.5 |
|---|-------------|-------------|--------------|
| Handling Emissions | 2.98 | 1.41 | 0.21 |
| Paved Haul Roads | 1.96 | 0.39 | 0.10 |
| Storage Pile | 0.03 | 0.02 | 0.002 |
| Total (lb/hr) | 4.97 | 1.82 | 0.31 |
| <i>Insignificant Modification Threshold</i> | -- | 0.855 | -- |
| <i>Minor Amendment Threshold</i> | -- | 3.42 | -- |

ANNUAL EMISSIONS

Controlled Limited Annual Emissions (tons/yr)

| | PM | PM10 | PM2.5 |
|------------------------|-------------|-------------|--------------|
| Handling Emissions | 1.41 | 0.67 | 0.10 |
| Paved Haul Roads | 0.76 | 0.15 | 0.04 |
| Storage Pile | 0.13 | 0.07 | 0.01 |
| Total (Tons/yr) | 2.30 | 0.88 | 0.15 |
| <i>PSD Threshold</i> | 250 | 250 | 250 |

Superior Minerals Inc.**Bin 34 Potential Emission Calculations**

| | |
|--------------------------------|------------------|
| Emission Unit ID Number | EQUI 160 |
| Stack/Vent Designation Number: | STRU 14 |
| Maximum Rated Capacity: | 40,000 tons/year |

Calculations Summary:

| Pollutant | Pollutant
Emission
Factor ¹
(lb/ton) | Pollutant
Emission
Rate
(lbs/hr) | Maximum
Uncontrolled
Emissions
(tpy) | Pollution
Control
Efficiency
(%) | Maximum
Controlled
Emissions
(lbs/hr) | Maximum
Controlled
Emissions
(tons/yr) |
|-------------------|--|---|---|---|--|---|
| PM | 0.0099 | 4.52 | 19.80 | 99% | 4.52E-02 | 0.20 |
| PM ₁₀ | 0.0016 | 0.10 | 0.46 | 93% | 7.31E-03 | 0.03 |
| PM _{2.5} | 0.0006 | 0.04 | 0.17 | 93% | 2.74E-03 | 0.01 |

¹ AP-42 Emission factors from Table 11.19.2-4 represent controlled with fabric filter. Uncontrolled emissions are calculated assuming a fabric filter control of 99% for PM and 93% for PM10 and PM2.5 according to Minn. R. 7011.0070.



GI-07 Spreadsheet

Doc Type: Permit Application

1b) Agency Interest ID No.: 65

2) Facility Name: Superior Minerals Company

Emissions by Source Table

[illegible]

☐ Application is being submitted on paper, and editable calculation spreadsheet(s) are included on an enclosed CD.



Minnesota Pollution
Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

Alternate Format

GI-07 Spreadsheet

Facility Emissions Summary

Air Quality Permit Program

Doc Type: Permit Application

1a) AQ Facility ID No.: 13900044
2) Facility Name: Superior Minerals Company

1b) Agency Interest ID No.: 65

You may use and submit this spreadsheet in place of Form GI-07. Follow the instructions for Form GI-07 to complete this spreadsheet. This spreadsheet can be copied into a tab for your emissions spreadsheet and must be submitted on a CD with your application. If you need to provide emissions information for more emissions units, add more sets of columns (3a through 3f) to the right as needed in the Emissions by Source table. If you need to provide information for more pollutants, add rows as needed.

Emissions by Source Table

| 3a) Delta ID No.: | | | | | | 3a) Delta ID No.: | | | | | | 3a) Delta ID No.: | | | | | |
|-----------------------|--------------|---------------|---------|-------------|-------------------|-----------------------|--------------|---------------|---------|-------------|-------------------|-----------------------|--------------|---------------|---------|-------------|-------------------|
| 3b) Tempo SI ID No.: | | EQUI135 | | | | 3b) Tempo SI ID No.: | | EQUI134 | | | | 3b) Tempo SI ID No.: | | EQUI143 | | | |
| 3c)
Pollutant Name | 3d)
CAS # | 3e) Potential | | | 3f)
Actual tpy | 3c)
Pollutant Name | 3d)
CAS # | 3e) Potential | | | 3f)
Actual tpy | 3c)
Pollutant Name | 3d)
CAS # | 3e) Potential | | | 3f)
Actual tpy |
| | | Lbs per Hr | Unc tpy | Limited tpy | | | | Lbs per Hr | Unc tpy | Limited tpy | | | | Lbs per Hr | Unc tpy | Limited tpy | |
| PM | | 1.05 | 4.62 | 0.29 | NA | PM | | 1.05 | 4.62 | 0.29 | NA | PM | | 1.05 | 4.62 | 0.29 | NA |
| PM10 | | 0.50 | 2.18 | 0.14 | NA | PM10 | | 0.50 | 2.18 | 0.14 | NA | PM10 | | 0.50 | 2.18 | 0.14 | NA |
| PM2.5 | | 0.08 | 0.33 | 0.02 | NA | PM2.5 | | 0.08 | 0.33 | 0.02 | NA | PM2.5 | | 0.08 | 0.33 | 0.02 | NA |
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GI-07 Spreadsheet

Doc Type: Permit Application

2) Facility Name: Superior Minerals Company

Emissions by Source Table

☐ Application is being submitted on paper, and editable calculation spreadsheet(s) are included on an enclosed CD.

Superior Minerals Company
Emission Calculations - Pet Coke Storage Project
Total Project Emissions

C:\Users\thanafy\Downloads\[2887536 - 65 - PUBLIC - - PET COKE EMISSION CALCULATIONS 04 12 19.XLSX - TEMPO_Application(1).xlsx]Project Emissions

11/18/2025

HOURLY EMISSIONS

Controlled Hourly Emissions (lb/hr) - Scenario 1 (Directly out to barge)

| | PM | PM10 | PM2.5 |
|---|-------------|-------------|-------------|
| Handling Emissions - Scenario 1 | 2.93 | 1.39 | 0.21 |
| Paved Haul Road ¹ | 1.72 | 0.34 | 0.08 |
| Storage Pile | 0.03 | 0.02 | 0.002 |
| Total (lb/hr) | 4.68 | 1.74 | 0.30 |
| <i>Insignificant Modification Threshold</i> | -- | 0.855 | -- |
| <i>Minor Amendment Threshold</i> | -- | 3.42 | -- |

Controlled Hourly Emissions (lb/hr) - Scenario 2 (To storage prior to barge)

| | PM | PM10 | PM2.5 |
|---|-------------|-------------|-------------|
| Handling Emissions - Scenario 2 | 5.36 | 2.54 | 0.38 |
| Paved Haul Roads | 1.96 | 0.39 | 0.10 |
| Storage Pile | 0.03 | 0.02 | 0.002 |
| Total (lb/hr) | 7.36 | 2.94 | 0.48 |
| <i>Insignificant Modification Threshold</i> | -- | 0.855 | -- |
| <i>Minor Amendment Threshold</i> | -- | 3.42 | -- |

ANNUAL EMISSIONS

Controlled Maximum Annual Emissions (tons/yr) - Scenario 1 (Directly out to barge)

| | PM | PM10 | PM2.5 |
|---------------------------------|--------------|-------------|-------------|
| Handling Emissions - Scenario 1 | 12.83 | 6.07 | 0.92 |
| Paved Haul Roads | 7.52 | 1.50 | 0.37 |
| Storage Pile | 0.13 | 0.07 | 0.01 |
| Total (Tons/yr) | 20.49 | 7.64 | 1.30 |

Controlled Maximum Annual Emissions (tons/yr) - Scenario 2 (To storage prior to barge)

| | PM | PM10 | PM2.5 |
|---------------------------------|--------------|--------------|-------------|
| Handling Emissions - Scenario 2 | 23.48 | 11.11 | 1.68 |
| Paved Haul Roads | 8.61 | 1.72 | 0.42 |
| Storage Pile | 0.13 | 0.07 | 0.01 |
| Total (Tons/yr) | 32.22 | 12.89 | 2.11 |

Controlled Limited Annual Emissions (tons/yr) - Scenario 1 (Directly out to barge)

| | PM | PM10 | PM2.5 |
|---------------------------------|-------------|-------------|-------------|
| Handling Emissions - Scenario 1 | 1.17 | 0.55 | 0.08 |
| Paved Haul Road | 0.69 | 0.14 | 0.03 |
| Storage Pile | 0.13 | 0.07 | 0.01 |
| Total (Tons/yr) | 1.99 | 0.76 | 0.13 |

Controlled Limited Annual Emissions (tons/yr) - Scenario 2 (To storage prior to barge)

| | PM | PM10 | PM2.5 |
|---------------------------------|-------------|-------------|--------------|
| Handling Emissions - Scenario 2 | 1.76 | 0.83 | 0.13 |
| Paved Haul Roads | 0.76 | 0.15 | 0.04 |
| Storage Pile | 0.13 | 0.07 | 0.01 |
| Total (Tons/yr) | 2.65 | 1.05 | 0.17 |

1 - Scenario 1 includes the paved pet coke to unloading area haul road only. The loader haul road is not included because the material is loaded out directly to the barge.

Superior Minerals Company
Emission Calculations - Pet Coke Storage Project
Handling Emissions - Scenario 1

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| TEMPO ID | Source Description | Hourly
Throughput ¹

(tons/hr) | Limited Annual
Throughput ²

(tons/yr) | Emission Factor Input Parameters | | | Particulate Emission
Factor | | | | | Uncontrolle | | |
|----------|---|--|--|----------------------------------|-----------------------|-----------------------------|--------------------------------|------------------|-------------------|--------|-----------|-------------|------------------|-------------------|
| | | | | Silt ³ | Moisture ³ | Max Wind Speed ⁴ | | | | | | PM | PM ₁₀ | PM _{2.5} |
| | | | | (%) | (%) | (miles/hr) | PM | PM ₁₀ | PM _{2.5} | Units | Reference | (lb/hr) | | |
| EQUI131 | Pet Coke Unloading to Conveyor 1 | 500 | 400,000 | NA | 5.25 | 9.8 | 0.00146 | 0.00069 | 0.00010 | lb/ton | 13.2.4-3 | 0.73 | 0.35 | 0.05 |
| EQUI132 | Pet Coke Conveyor 1 Transfer Point to Stacker | 500 | 400,000 | NA | 5.25 | 9.8 | 0.00146 | 0.00069 | 0.00010 | lb/ton | 13.2.4-3 | 0.73 | 0.35 | 0.05 |
| EQUI134 | Pet Coke Conveyor Transfer Point 3 | 500 | 400,000 | NA | 5.25 | 9.8 | 0.00146 | 0.00069 | 0.00010 | lb/ton | 13.2.4-3 | 0.73 | 0.35 | 0.05 |
| EQUI143 | Pet Coke Barge Loading | 500 | 400,000 | NA | 5.25 | 9.8 | 0.00146 | 0.00069 | 0.00010 | lb/ton | 13.2.4-3 | 0.73 | 0.35 | 0.05 |
| | | | | | | | | | | | | 2.93 | 1.39 | 0.21 |

- 1 - Through
500 tons per hour is based on the throughput prior to unloading system. This value is based on the maximum hourly amount the trucks could haul and unloading in an hour.
- 20 trucks/hr
25 tons/truck
500 tons/hr
- Based on 1 truck unloading every 3 minutes. Maximum unloading rate of the system.
- 2 - Superior Minerals has estimated the annual capacity of the pet coke system. The permitting applicability is based on unlimited annual throughput.
- 3 - Moisture content from actual pet coke specification sheet. Average of value from product specification sheet. Silt content is not required in the emission factor calculation.
- 4 - Average wind speed obtained from MSP meteorological data from 2012-2016

| d Emissions | | | Controlled Emissions | | | | | | Limited Annual Emissions | | |
|--------------|------------------|-------------------|----------------------|------------------|-------------------|--------------|------------------|-------------------|--------------------------|------------------|-------------------|
| PM | PM ₁₀ | PM _{2.5} | PM | PM ₁₀ | PM _{2.5} | PM | PM ₁₀ | PM _{2.5} | PM | PM ₁₀ | PM _{2.5} |
| (tons/yr) | | | (lb/hr) | | | (tons/yr) | | | (tons/yr) | | |
| 3.21 | 1.52 | 0.23 | 0.73 | 0.35 | 0.052 | 3.21 | 1.52 | 0.23 | 0.29 | 0.14 | 0.021 |
| 3.21 | 1.52 | 0.23 | 0.73 | 0.35 | 0.052 | 3.21 | 1.52 | 0.23 | 0.29 | 0.14 | 0.021 |
| 3.21 | 1.52 | 0.23 | 0.73 | 0.35 | 0.052 | 3.21 | 1.52 | 0.23 | 0.29 | 0.14 | 0.021 |
| 3.21 | 1.52 | 0.23 | 0.73 | 0.35 | 0.052 | 3.21 | 1.52 | 0.23 | 0.29 | 0.14 | 0.021 |
| 12.83 | 6.07 | 0.92 | 2.93 | 1.39 | 0.21 | 12.83 | 6.07 | 0.92 | 1.17 | 0.55 | 0.08 |

Superior Minerals Company
Emission Calculations - Pet Coke Storage Project
Handling Emissions - Scenario 2

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| TEMPO ID | Source Description | Notes | Hourly Throughput ¹ | Limited Annual Throughput ² | Emission Factor Input Parameters | | | Particulate Emission Factor | | | | |
|----------|---|-----------------------------|--------------------------------|--|----------------------------------|-----------------------|-----------------------------|-----------------------------|------------------|-------------------|--------|-----------|
| | | | (tons/hr) | (tons/yr) | Silt ³ | Moisture ³ | Ave Wind Speed ⁴ | PM | PM ₁₀ | PM _{2.5} | Units | Reference |
| | | | | | (%) | (%) | (miles/hr) | | | | | |
| EQUI131 | Pet Coke Unloading to Conveyor 1 | -- | 500 | 400,000 | NA | 5.25 | 9.8 | 0.00146 | 0.00069 | 0.00010 | lb/ton | 13.2.4-3 |
| EQUI132 | Pet Coke Conveyor 1 Transfer Point to Stacker | -- | 500 | 400,000 | NA | 5.25 | 9.8 | 0.00146 | 0.00069 | 0.00010 | lb/ton | 13.2.4-3 |
| EQUI133 | Pet Coke Stacker Conveyor Transfer Point 2 | Located in 3 sided building | 500 | 400,000 | NA | 5.25 | 9.8 | 0.00146 | 0.00069 | 0.00010 | lb/ton | 13.2.4-3 |
| EQUI135 | Pet Coke Front End Loader to Hopper Conveyor System | Located in 3 sided building | 720 | 400,000 | NA | 5.25 | 9.8 | 0.00146 | 0.00069 | 0.00010 | lb/ton | 13.2.4-3 |
| EQUI134 | Pet Coke Conveyor Transfer Point 3 | -- | 720 | 400,000 | NA | 5.25 | 9.8 | 0.00146 | 0.00069 | 0.00010 | lb/ton | 13.2.4-3 |
| EQUI143 | Pet Coke Barge Loading | -- | 720 | 400,000 | NA | 5.25 | 9.8 | 0.00146 | 0.00069 | 0.00010 | lb/ton | 13.2.4-3 |

1 - Throughput Information for Pet Coke Project

500 tons per hour is based on the throughput prior to unloading system. This value is based on the maximum hourly amount the trucks could haul and unloading in an hour.

20 trucks/hr
25 tons/truck
500 tons/hr

Based on 1 truck unloading every 3 minutes. Maximum unloading rate of the system.

720 tons per hour is based on the maximum hourly capacity of the conveyor system after the hopper.

2 - Superior Minerals has estimated the annual capacity of the pet coke system. The permitting applicability is based on unlimited annual throughput.

3 - Moisture content from actual pet coke specification sheet. Average of value from product specification sheet. Silt content is not required in the emission factor calculation.

4 - Average wind speed obtained from MSP meteorological data from 2012-2016

| Dust Control Strategy | | Uncontrolled Emissions | | | | | | Controlled Emissions | | | | | | Limited Controlled Annual Emissions | | |
|--------------------------|--------------------|------------------------|------------------|-------------------|-----------|------------------|-------------------|----------------------|------------------|-------------------|-----------|------------------|-------------------|-------------------------------------|------------------|-------------------|
| Control Method | Control Efficiency | PM | PM ₁₀ | PM _{2.5} | PM | PM ₁₀ | PM _{2.5} | PM | PM ₁₀ | PM _{2.5} | PM | PM ₁₀ | PM _{2.5} | PM | PM ₁₀ | PM _{2.5} |
| | (%) | (lb/hr) | | | (tons/yr) | | | (lb/hr) | | | (tons/yr) | | | (tons/yr) | | |
| None | 0 | 0.73 | 0.35 | 0.05 | 3.21 | 1.52 | 0.23 | 0.73 | 0.35 | 0.052 | 3.21 | 1.52 | 0.23 | 0.29 | 0.14 | 0.021 |
| None | 0 | 0.73 | 0.35 | 0.05 | 3.21 | 1.52 | 0.23 | 0.73 | 0.35 | 0.052 | 3.21 | 1.52 | 0.23 | 0.29 | 0.14 | 0.021 |
| None | 0 | 0.73 | 0.35 | 0.05 | 3.21 | 1.52 | 0.23 | 0.73 | 0.35 | 0.052 | 3.21 | 1.52 | 0.23 | 0.29 | 0.14 | 0.021 |
| None | 0 | 1.05 | 0.50 | 0.08 | 4.62 | 2.18 | 0.33 | 1.05 | 0.50 | 0.076 | 4.62 | 2.18 | 0.33 | 0.29 | 0.14 | 0.021 |
| None | 0 | 1.05 | 0.50 | 0.08 | 4.62 | 2.18 | 0.33 | 1.05 | 0.50 | 0.076 | 4.62 | 2.18 | 0.33 | 0.29 | 0.14 | 0.021 |
| None | 0 | 1.05 | 0.50 | 0.08 | 4.62 | 2.18 | 0.33 | 1.05 | 0.50 | 0.076 | 4.62 | 2.18 | 0.33 | 0.29 | 0.14 | 0.02 |
| Total Project Emissions: | | 5.36 | 2.54 | 0.38 | 23.48 | 11.11 | 1.68 | 5.36 | 2.54 | 0.38 | 23.48 | 11.11 | 1.68 | 1.76 | 0.83 | 0.13 |

Superior Minerals Company
Emission Calculations - Pet Coke Storage Project
Paved On-Site Roads - Pet Coke to Unloading Area

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E = k * [(sl)^0.91 * (W)^1.02] / [1 - 1.2P / N]

where:
E = Controlled emission factor (lb/VMT, vehicle miles traveled), AP-42, Section 13.2.1, Equation 1, Dec 2003.
k = Particle size multiplier (lb/vmt), AP-42, Table 13.2.1-1
sl = Road surface silt loading (g/m²), Table 13.2.1-3, Based on Quarry Mean value
W = Mean vehicle weight (ton)
P = Number of Wet Days, Obtained from MSP meteorological data from 2012-2016
N = Number of Days in Averaging Period
c = Control Efficiency

Fugitive Dust Emission Factor Calculations for PM, PM10, PM2.5 Emissions from Paved Roads:

| Fug Unit # | Activity | PM Particle Size Multiplier, k (lb/VMT) | PM10 Particle Size Multiplier, k (lb/VMT) | PM2.5 Particle Size Multiplier, k (lb/VMT) | Silt Loading (g/m2) | Mean Vehicle Weight, W (tons) | Precipitation Days, p (days) | Uncontrolled PM Emission Factor, E (lb/VMT) | Uncontrolled PM10 Emission Factor, E (lb/VMT) | Uncontrolled PM2.5 Emission Factor, E (lb/VMT) | Control Efficiency ¹ (%) | Controlled PM Factor, E (lb/VMT) | Controlled PM10 Factor, E (lb/VMT) | Controlled PM2.5 Factor, E (lb/VMT) |
|------------|---|---|---|--|---------------------|-------------------------------|------------------------------|---|---|--|-------------------------------------|----------------------------------|------------------------------------|-------------------------------------|
| FUGI16 | Paved Road - Pet Coke to Unloading Area (Empty) | 0.011 | 0.0022 | 0.00054 | 8.20 | 15 | 123 | 0.70 | 0.14 | 0.035 | 75% | 0.176 | 0.035 | 0.009 |
| FUGI16 | Paved Road - Pet Coke to Unloading Area (Full) | 0.011 | 0.0022 | 0.00054 | 8.20 | 40 | 123 | 1.91 | 0.38 | 0.094 | 75% | 0.479 | 0.096 | 0.023 |

Fugitive Dust Calculations for PM, PM10, PM2.5 Emissions from Paved Roads:

| Road Segment | | Controlled PM Factor, E (lb/VMT) | Controlled PM10 Factor, E (lb/VMT) | Controlled PM2.5 Factor, E (lb/VMT) | Maximum Hourly Trips/hr | Limited Annual Trips/yr | Feet per Trip | Vehicle Miles Traveled (VMT/hr) | Vehicle Miles Traveled (VMT/yr) | Controlled Unlimited PM Emissions | | Controlled Unlimited PM10 Emissions | | Controlled Unlimited PM2.5 Emissions | | Controlled Limited Emissions Annual (tons/year) ² | | |
|--------------|---|----------------------------------|------------------------------------|-------------------------------------|-------------------------|-------------------------|---------------|---------------------------------|---------------------------------|-----------------------------------|------------------|-------------------------------------|------------------|--------------------------------------|------------------|--|----------------|-----------------|
| | | | | | | | | | | Hourly (lb/hr) | Annual (tons/yr) | Hourly (lb/hr) | Annual (tons/yr) | Hourly (lb/hr) | Annual (tons/yr) | PM (tons/yr) | PM10 (tons/yr) | PM2.5 (tons/yr) |
| FUGI16 | Paved Road - Pet Coke to Unloading Area (Empty) | 0.176 | 0.035 | 0.009 | 20 | 16000 | 700 | 2.65 | 2121.21 | 0.47 | 2.04 | 0.09 | 0.41 | 0.023 | 0.10 | 0.19 | 0.04 | 0.01 |
| FUGI16 | Paved Road - Pet Coke to Unloading Area (Full) | 0.479 | 0.096 | 0.023 | 20 | 16000 | 690 | 2.61 | 2090.91 | 1.25 | 5.48 | 0.25 | 1.10 | 0.061 | 0.27 | 0.50 | 0.10 | 0.02 |
| TOTAL = | | | | | | | | | | 1.72 | 7.52 | 0.34 | 1.50 | 0.08 | 0.37 | 0.69 | 0.14 | 0.03 |

¹ 75% control efficiency was assumed for the project as described in the approved facility Fugitive Dust Control Plan.

² Annual emissions are based on a maximum of 400,000 tons per year.

Superior Minerals Company
Emission Calculations - Pet Coke Storage Project
Paved On-Site Roads - Loader Road

C:\Users\thana\Downloads\2887536 - 65 - PUBLIC - - PET COKE EMISSION CALCULATIONS 04 12 19.XLSX - TEMPO_Application(1).xlsx|Handling Emissions Option 1

E = k * [(sl)^0.91 * (W)^1.02][1-1.2P/N]

where:
E = Controlled emission factor (lb/VMT, vehicle miles traveled), AP-42, Section 13.2.1, Equation 1, Dec 2003.
k = Particle size multiplier (lb/vmt), AP-42, Table 13.2.1-1
sl = Road surface silt loading (g/m²), Table 13.2.1-3, Based on Quarry Mean value
W = Mean vehicle weight (ton)
P = Number of Wet Days, Obtained from MSP meteorological data from 2012-2016
N = Number of Days in Averaging Period
c = Control Efficiency

Fugitive Dust Emission Factor Calculations for PM, PM10, PM2.5 Emissions from Paved Roads:

| Fug Unit # | Activity | PM Particle Size Multiplier, k (lb/VMT) | PM10 Particle Size Multiplier, k (lb/VMT) | PM2.5 Particle Size Multiplier, k (lb/VMT) | Silt Loading (g/m2) | Mean Vehicle Weight, W ³ (tons) | Precipitation Days, p (days) | Uncontrolled PM Emission Factor, E (lb/VMT) | Uncontrolled PM10 Emission Factor, E (lb/VMT) | Uncontrolled PM2.5 Emission Factor, E (lb/VMT) | Control Efficiency ¹ (%) | Controlled PM Factor, E (lb/VMT) | Controlled PM10 Factor, E (lb/VMT) | Controlled PM2.5 Factor, E (lb/VMT) |
|------------|--------------------------------------|---|---|--|---------------------|--|------------------------------|---|---|--|-------------------------------------|----------------------------------|------------------------------------|-------------------------------------|
| FUG117 | Paved Road - Pet Coke Loader (Empty) | 0.011 | 0.0022 | 0.00054 | 8.20 | 20 | 123 | 0.94 | 0.19 | 0.046 | 75% | 0.236 | 0.047 | 0.012 |
| FUG117 | Paved Road - Pet Coke Loader (Full) | 0.011 | 0.0022 | 0.00054 | 8.20 | 26 | 123 | 1.23 | 0.25 | 0.061 | 75% | 0.308 | 0.062 | 0.015 |

Fugitive Dust Calculations for PM, PM10, PM2.5 Emissions from Paved Roads:

| Road Segment | | Controlled PM Factor, E (lb/VMT) | Controlled PM10 Factor, E (lb/VMT) | Controlled PM2.5 Factor, E (lb/VMT) | Maximum Hourly Trips/hr | Limited Annual Trips/yr | Feet per Trip | Vehicle Miles Traveled (VMT/hr) | Vehicle Miles Traveled (VMT/yr) | Controlled PM Emissions | | Controlled PM10 Emissions | | Controlled PM2.5 Emissions | | Controlled Limited Emissions Annual (tons/year) ² | | |
|--------------|--------------------------------------|----------------------------------|------------------------------------|-------------------------------------|-------------------------|-------------------------|---------------|---------------------------------|---------------------------------|-------------------------|------------------|---------------------------|------------------|----------------------------|------------------|--|----------------|-----------------|
| | | | | | | | | | | Hourly (lb/hr) | Annual (tons/yr) | Hourly (lb/hr) | Annual (tons/yr) | Hourly (lb/hr) | Annual (tons/yr) | PM (tons/yr) | PM10 (tons/yr) | PM2.5 (tons/yr) |
| FUG117 | Paved Road - Pet Coke Loader (Empty) | 0.236 | 0.047 | 0.012 | 120 | 66,667 | 20 | 0.45 | 252.53 | 0.11 | 0.47 | 0.02 | 0.09 | 0.005 | 0.02 | 0.03 | 0.01 | 0.001 |
| FUG117 | Paved Road - Pet Coke Loader (Full) | 0.308 | 0.062 | 0.015 | 120 | 66,667 | 20 | 0.45 | 252.53 | 0.14 | 0.61 | 0.03 | 0.12 | 0.007 | 0.03 | 0.04 | 0.01 | 0.002 |
| TOTAL = | | | | | | | | | | 0.25 | 1.08 | 0.05 | 0.22 | 0.01 | 0.05 | 0.07 | 0.01 | 0.003 |

¹ 75% control efficiency was assumed for the project as described in the approved facility Fugitive Dust Control Plan.

² Annual emissions are based on a maximum of 400,000 tons per year.

Superior Minerals Company
Emission Calculations - Pet Coke Storage Project
Fugitive Dust Emissions from Wind Erosion at Pile

EQUATIONS:

$$E = 1.7 * (s/1.5) * [(365-p) / 235] * (f/15)$$

where:

E = TSP emission factor (lb/day/acre) from AP-42 4th Edition, Section 11.2.3-5, Equation 3, (5/83).

s = silt content of aggregate (%)

p = number of days with greater than or equal to 0.25 mm (0.01 in.) of precipitation per year

f = percentage of time that the unobstructed wind speed exceeds 5.4 m/s (12 mph)

ASSUMPTIONS:

- TSP emission factor converted to PM₁₀ and PM_{2.5} based on particle size multipliers in AP-42, Section 13.2.5.
 TSP multiplier = 1.0
 PM₁₀ multiplier = 0.5
 PM_{2.5} multiplier = 0.075
- Silt content based on AP-42 Section 13.2.4, Table 12.2.4-1, Average Silt for Coke Breeze
- An average number of days with precipitation greater than or equal to 0.25 mm based on precipitation data from 2012-2016 Minneapolis / St. Paul Intl. Airport observation station.
- The percent of time with wind speeds greater than 5.4 m/s based on wind data from the 2012-2016 Minneapolis / St. Paul Intl. Airport observation station.
- Total acres is based on pet coke storage pile capacity

MSP Meteorological Data Summary

| Data Set | Hourly Observations (number) | Wind Speed Greater Than 5.4 m/s | |
|-----------|------------------------------|---------------------------------|-------|
| | | (no. hours) | (%) |
| | | | |
| 2012-2016 | 43,848 | 12,755 | 14.77 |
| Total | 43,848 | 12,755 | 14.77 |

| Storage Pile | s (%) | p (no. days) | f (%) | TSP (lb/acre/day) | PM ₁₀ (lb/acre/day) | PM _{2.5} (lb/acre/day) | Pile Size (acres) |
|--------------------------------|-------|--------------|-------|-------------------|--------------------------------|---------------------------------|-------------------|
| FUGI18 - Pet Coke Storage Pile | 4.90 | 123 | 14.77 | 5.63 | 2.816 | 0.422 | 0.13 |

Emissions Totals

| Storage Pile | PM (lb/hr) | PM (tpy) | PM ₁₀ (lb/hr) | PM ₁₀ (tpy) | PM _{2.5} (lb/hr) | PM _{2.5} (tpy) |
|--------------------------------|------------|----------|--------------------------|------------------------|---------------------------|-------------------------|
| FUGI18 - Pet Coke Storage Pile | 0.03 | 0.13 | 0.02 | 0.07 | 0.002 | 0.01 |

Superior Minerals Company

Emission Calculations - Pet Coke Storage Project

Industrial Process Equipment Rule Calculation

C:\Users\thanafy\Downloads\[2887536 - 65 - PUBLIC - - PET COKE EMISSION CALCULATIONS 04 12 19.XLSX - TEMPO_Application(1).xlsx]Handling Emissions Option 1

Industrial Process Equipment Rule (IPER): Minn. Rule 7011.0700 - 7011.0735

Emission Unit Throughput

Process (P) = 500 ton/hr
Vent (V) = NA dscfm Assume worst case where dscfm = scfm

Minn. R. 7011.0715, Standards of Performance for Post-1969 Industrial Process Equipment:

Minn. R. 7011.0730 Maximum Particulate Emissions for the Allocated Process Weight¹:

Max Particulate Emission Rate = $E = 17.31 \cdot P^{0.16}$ Table 1, for $P > 30$ ton/hour

$$E = 46.79 \text{ lb/hr}$$

Emission Unit Throughput

Process (P) = 720 ton/hr
Vent (V) = NA dscfm Assume worst case where dscfm = scfm

Minn. R. 7011.0715, Standards of Performance for Post-1969 Industrial Process Equipment:

Minn. R. 7011.0730 Maximum Particulate Emissions for the Allocated Process Weight¹:

Max Particulate Emission Rate = $E = 17.31 \cdot P^{0.16}$ Table 1, for $P > 30$ ton/hour

$$E = 49.60 \text{ lb/hr}$$

Attachment 2 – Subject item inventory and facility requirements

SI List

AI ID (Name): 65 (Superior Minerals Co)
Activity: IND20100001

| SI Category | SI Type | Subject Item ID | Delta Designation | Description | |
|-----------------|--------------------------------------|-----------------|-------------------|---|--|
| Activity | Insignificant Air Emissions Activity | ACTV 2 | Null | All IAs | |
| Agency Interest | Conventional Site | AI SI 65 | Null | Null | |
| Equipment | Conveyor | EQUI 1 | EU142 | Conveyor W3 Bradley Dryer to Conveyor W2 | |
| | | EQUI 2 | EU001 | Conveyor #1 | |
| | | EQUI 54 | EU041 | Dryer Feed Belt Conveyor B1 | |
| | | EQUI 80 | EU093 | Bradley Conveyor B2 | |
| | | EQUI 82 | EU095 | Leg B2 Bradley | |
| | | EQUI 86 | EU099 | Conveyor W2 Bradley Dryer to Williams System | |
| | | EQUI 92 | EU105 | Leg #8 - Ultrafine Feed | |
| | | EQUI 101 | EU138 | Conveyor L1 - Lehigh Hopper to Dryer | |
| | | EQUI 103 | EU141 | Conveyor L2 | |
| | | EQUI 116 | Null | Limestone Conveyor 1 | |
| | | EQUI 118 | Null | Limestone Conveyor 3 | |
| | | EQUI 119 | Null | Limestone Conveyor 4 | |
| | | EQUI 120 | Null | Limestone Conveyor 5 | |
| | | EQUI 121 | Null | Limestone Conveyor 6 | |
| | | EQUI 122 | Null | Limestone Conveyor 7 | |
| | | EQUI 123 | Null | Limestone Conveyor 8 | |
| | | EQUI 124 | Null | Limestone Conveyor 9 | |
| | | EQUI 125 | Null | Limestone Conveyor 10 | |
| | | EQUI 129 | Null | Screening Conveyor 1 | |
| | | EQUI 130 | Null | Screening Conveyor 2 | |
| | | EQUI 131 | Null | Pet Coke Unloading to Conveyor 1 | |
| | | EQUI 132 | Null | Pet Coke Conveyor 1 Transfer Point to Stacker | |
| | | EQUI 133 | Null | Pet Coke Stacker Conveyor Transfer Point 2 | |
| | | EQUI 134 | Null | Pet Coke Conveyor Transfer Point 3 | |
| | | EQUI 135 | Null | Pet Coke Front End Loader to Hopper Conveyor System | |
| | | EQUI 143 | Null | Pet Coke Barge Loading | |
| | Crusher | EQUI 93 | EU130 | Rock Breaker - Stamler | |
| | | EQUI 94 | EU131 | Roll Crusher | |
| | Dryer/Oven, unknown firing method | EQUI 55 | EU042 | Bradley Rotary Dryer #2 | |
| | Elevator | EQUI 4 | EU003 | Leg #1 14" Bucket Elevator | |
| | | EQUI 7 | EU006 | Leg #2 Bucket Elevator | |
| | | EQUI 8 | EU007 | Leg #3 Bucket Elevator | |
| | | EQUI 24 | EU025 | Leg #4 Bucket Elevator | |
| | | EQUI 42 | EU069 | Leg L#1 Dryer Discharge Bucket Elevator | |
| | | EQUI 57 | EU044 | Leg B1 Dryer Rock Elevator | |
| | | EQUI 60 | EU053 | Leg #7 Elevator | |
| | | EQUI 63 | EU057 | Leg 2 Bradley Ball Mill Elevator | |
| | Filling Operations Equipment | EQUI 126 | Null | Bin 33 Super Sack Filling Station | |
| | | EQUI 127 | Null | Super Sack Filling Station | |
| | Hopper | EQUI 53 | EU040 | Dock - Target Hopper | |
| | Loading-Unloading Equipment | EQUI 64 | EU063 | Bin 22 | |
| | | EQUI 102 | EU140 | Closed Top Loadout system | |
| | Milling Equipment | EQUI 3 | EU002 | Williams Hammermill | |
| | | EQUI 6 | EU005 | Williams Roller Mill & Burner | |
| | | EQUI 33 | EU054 | Raymond Roller Mill & Heater | |
| | Other Emission Unit | EQUI 41 | EU068 | Lehigh Dryer & Heater | |
| | Rolling Equipment | EQUI 29 | EU047 | Bradley Roller Mill Separator & Heater | |
| | Screens | EQUI 9 | EU008 | Screen #1 Coarse Screen | |
| | | EQUI 10 | EU009 | Screen #2 Fines Screen | |
| | | EQUI 95 | EU132 | Screen #3 - M Screener | |
| | | EQUI 96 | EU133 | Screener B1 | |
| | | EQUI 128 | Null | Triple-Deck Screener | |
| | Separation Equipment | EQUI 36 | EU060 | Ultrafine Classifier & Heater | |
| | | EQUI 81 | EU094 | Bradley Dryer Cyclone B1 | |
| | | EQUI 87 | EU100 | Cyclone Bradley B2 | |
| | | EQUI 88 | EU101 | Cyclone Bradley B3 | |
| | | EQUI 89 | EU102 | Cyclone Raymond R1 | |
| | | EQUI 90 | EU103 | Cyclone Williams #1 | |
| | | EQUI 100 | EU137 | Ultrafines Cyclone - Cyclone #2 | |
| | | EQUI 104 | EU139 | Classifier W-1 Williams | |
| | | EQUI 144 | Null | Dryer Dust System Vent | |
| | | EQUI 145 | Null | Raymond Mill Dust System | |
| | | EQUI 146 | Null | DL60 Powder Loading | |
| | | EQUI 147 | Null | Ultrafine Bin Vent System | |
| | | EQUI 148 | Null | Dust System #22 | |
| | | EQUI 149 | Null | Lehigh Slag Dryer System | |
| | | EQUI 150 | Null | Dust System #25 | |
| | | EQUI 151 | Null | Bin 25 Dust System | |
| | | EQUI 152 | Null | Bin 20 Dust System | |
| | | EQUI 153 | Null | Williams Mill Dust System | |
| | | EQUI 154 | Null | Dust System #2 | |

SI List

AI ID (Name): 65 (Superior Minerals Co)
Activity: IND20100001

| SI Category | SI Type | Subject Item ID | Delta Designation | Description | |
|-------------|------------------------------------|-----------------|-------------------|---|--|
| Equipment | Separation Equipment | EQUI 155 | Null | Dust System #3 | |
| | | EQUI 156 | Null | Dust System #8 | |
| | | EQUI 157 | Null | Dust System #11 | |
| | | EQUI 158 | Null | Bradley Dolomite Circuit | |
| | | EQUI 159 | EU098 | Classifier R-1 Raymond Mill | |
| | Silo/Bin | EQUI 5 | EU004 | Bin 9 Storage Silo | |
| | | EQUI 11 | EU010 | Bin 15 CC70 | |
| | | EQUI 12 | EU011 | Bin 6 CC20 | |
| | | EQUI 13 | EU012 | Bin 7 CC30 | |
| | | EQUI 14 | EU013 | Bin 8 CC40 | |
| | | EQUI 15 | EU014 | Bin 12 CC10 | |
| | | EQUI 18 | EU019 | Bin 16 CC70 | |
| | | EQUI 25 | EU026 | Bin 1 CC20 | |
| | | EQUI 26 | EU027 | Bin 2 Shell & Bone | |
| | | EQUI 30 | EU048 | Bin 20 | |
| | | EQUI 31 | EU049 | Bin 28 | |
| | | EQUI 48 | EU079 | Bin 19 CC70 | |
| | | EQUI 50 | EU081 | Bin 21 | |
| | | EQUI 59 | EU052 | Raw Material Bin 26 | |
| | | EQUI 61 | EU055 | Bin 18 CC50 | |
| | | EQUI 71 | EU084 | Bin 24 | |
| | | EQUI 72 | EU085 | Bin 23 | |
| | | EQUI 73 | EU086 | Bin 27 Raymond Mill Feed | |
| | | EQUI 74 | EU087 | Bin 29 Warehouse Bagger Bin | |
| | | EQUI 75 | EU088 | Bin 31 CC70 | |
| | | EQUI 76 | EU089 | Bin 32 CC70 | |
| | | EQUI 77 | EU090 | Bin 25 Warehouse Ultrafines | |
| | | EQUI 91 | EU104 | Dust system Transported to Bin 20, DS-12 | |
| | | EQUI 98 | EU135 | Transporter Bin 16/28 to Bin 19/20 | |
| | | EQUI 99 | EU136 | Transporter Bin 31/32 to Bin 19/10 | |
| | | EQUI 105 | EU028 | Bin 3 CC45 | |
| | | EQUI 106 | EU029 | Bin 4 CC70 | |
| | | EQUI 107 | EU030 | Bin 13 Free Flow | |
| | | EQUI 108 | EU031 | Bin 10 CC70 | |
| | | EQUI 109 | EU032 | Bin 11 | |
| | | EQUI 110 | EU033 | Bin 14 Free Flow | |
| | | EQUI 160 | Null | Bin 34 | |
| Fugitive | Material Handling/Transfer/Storage | FUGI 43 | Null | Front End Loader - Roller Mill/Ball Mill | |
| | | FUGI 44 | Null | Feed Hopper - Roller Mill (Raymond, Williams and Bradley) | |
| | | FUGI 45 | Null | Uncaptured emissions from Truck (Hopper) Loader | |
| | | FUGI 47 | Null | 12' Hopper - River Dock Unloading | |
| | | FUGI 48 | Null | Asphalt Pad Truck Loadout | |
| | | FUGI 49 | Null | Front End Loader - Small | |
| | | FUGI 50 | Null | Screened Material Loader | |
| | | FUGI 51 | Null | Feed Hopper - Lehigh Mill | |
| | | FUGI 52 | Null | Pile Unloading | |
| | Paved Road | FUGI 87 | Null | Paved Road Pet Coke to Unloading Area | |
| | | FUGI 88 | Null | Paved Road Pet Coke Loader | |
| | Piles | FUGI 46 | Null | Piles - Wind Erosion | |
| | | FUGI 89 | Null | Pet Coke Storage Pile | |
| Structure | Building | STRU 29 | Null | Lehigh | |
| | | STRU 30 | Null | North Bin | |
| | | STRU 31 | Null | West Bin | |
| | | STRU 32 | Null | Warehouse | |
| | | STRU 33 | Null | Marcy Building | |
| | | STRU 34 | Null | Shop/Office | |
| | | STRU 35 | Null | Bradley Building | |
| | | STRU 36 | Null | Bins/Storage | |
| | | STRU 37 | Null | Williams | |
| | Stack/Vent | STRU 1 | SV014 | Dryer Dust System Vent, DS-14 | |
| | | STRU 3 | SV016 | Raymond Mill Dust System, DS-16 | |
| | | STRU 4 | SV017 | DL60 Powder Loading, DS-17 | |
| | | STRU 6 | SV019 | Ultrafine Bin Vent System, DS-19 | |
| | | STRU 9 | SV022 | Dust System #22, DS-22 | |
| | | STRU 10 | SV023 | Lehigh Slag Dryer System, DS-23 | |
| | | STRU 12 | SV025 | Dust System #25, DS-25 | |
| | | STRU 13 | SV026 | Bin 25 Dust System, DS-26 | |
| | | STRU 14 | SV027 | Bin 20 Dust System, DS-27 | |
| | | STRU 16 | SV001 | Williams Mills Dust System, DS-1 | |
| | | STRU 17 | SV002 | Dust System #2, DS-2 | |
| | | STRU 18 | SV003 | Dust System #3, DS-3 | |
| | | STRU 23 | SV008 | Dust System #8, DS-8 | |
| | | STRU 26 | SV011 | Dust System #11, DS-11 | |

SI List

AI ID (Name): 65 (Superior Minerals Co)
Activity: IND20100001

| SI Category | SI Type | Subject Item ID | Delta Designation | Description | |
|----------------|---|-----------------|-------------------|--|--|
| Structure | Stack/Vent | STRU 27 | SV012 | Bradley Dolomite Circuit, DS-12 | |
| Total Facility | Air Quality Total Facility | TFAC 1 | 13900044 | Superior Minerals Co | |
| Treatment | 062-Dust Suppress by Chem Stabilizer/Wett.. | TREA 28 | Null | Dust Suppress by Chem Stabilizer/Wetting Agent | |

Insignificant Activities

AI ID (Name): 65 (Superior Minerals Co)
Activity: IND20100001

| SI Category | SI Type | Status Description | Sub Attribute Description | |
|-------------|--------------------------------------|--------------------|--------------------------------|--|
| Activity | Insignificant Air Emissions Activity | Active / Existing | Minn. R. 7007.1300, subp. 3(A) | |
| | | | Minn. R. 7007.1300, subp. 3(E) | |
| | | | Minn. R. 7007.1300, subp. 3(F) | |

Emission Units 1

AI ID (Name): 65 (Superior Minerals Co)
Activity: IND20100001

| SI Type | Subject Item ID | Delta Designation | Description | Manufacturer | Model | Max Design Capacity | Max Design Capacity Units | Material | Firing Method | Subject to CSAPR? | Electric Generating Capacity (MW) | Construction Start Date | Operation Start Date | Modification Date | |
|-----------------------------------|-----------------|-------------------|-------------------------|--------------|--------|---------------------|-------------------------------------|----------|------------------|-------------------|-----------------------------------|-------------------------|----------------------|-------------------|--|
| Dryer/Oven, unknown firing method | EQUI 55 | EU042 | Bradley Rotary Dryer #2 | Hardings | Custom | 48 | million British thermal units/hours | Heat | Not coal burning | Null | Null | 8/15/1999 | 11/15/1999 | Null | |

Emission Units 3

AI ID (Name): 65 (Superior Minerals Co)

Activity: IND20100001

| SI Type | Subject Item ID | Delta Designation | Description | Manufacturer | Model | Max Design Capacity | Max Design Capacity Units | Material | Construction Start Date | Operation Start Date | Modification Date | |
|----------|-----------------|-------------------|---|-------------------------|--------|---------------------|---------------------------|-----------|-------------------------|----------------------|-------------------|--|
| Conveyor | EQUI 1 | EU142 | Conveyor W3 Bradley Dryer to Conveyor W2 | Superior Minerals | Custom | 110 | tons/hours | Limestone | 11/1/2003 | 11/1/2003 | Null | |
| | EQUI 2 | EU001 | Conveyor #1 | SMC | Custom | 50 | tons/hours | Limestone | 9/1/1990 | 10/1/1990 | Null | |
| | EQUI 54 | EU041 | Dryer Feed Belt Conveyor B1 | Swift Conveyor Co | Custom | 110 | tons/hours | Limestone | 8/15/1999 | 11/15/1999 | Null | |
| | EQUI 80 | EU093 | Bradley Conveyor B2 | Industrial Kiln & Dryer | Custom | 110 | tons/hours | Limestone | 10/1/2004 | 10/1/2004 | Null | |
| | EQUI 82 | EU095 | Leg B2 Bradley | Schlagel | Custom | 50 | tons/hours | Limestone | 8/15/1999 | 10/15/1999 | Null | |
| | EQUI 86 | EU099 | Conveyor W2 Bradley Dryer to Williams System | S.M.C. | Custom | 50 | tons/hours | Limestone | 10/1/2003 | 10/1/2003 | Null | |
| | EQUI 92 | EU105 | Leg #8 - Ultrafine Feed | Schlagel | Custom | 25 | tons/hours | Limestone | 8/1/1999 | 8/1/1999 | Null | |
| | EQUI 101 | EU138 | Conveyor L1 - Lehigh Hopper to Dryer | Sutorbilt | Custom | 12 | tons/hours | Limestone | 9/1/2000 | 9/1/2000 | Null | |
| | EQUI 103 | EU141 | Conveyor L2 | Sutorbilt | Custom | 12 | tons/hours | Limestone | 9/1/2000 | 9/1/2000 | Null | |
| | EQUI 116 | Null | Limestone Conveyor 1 | Superior | Custom | 800 | tons/hours | Limestone | 4/1/2009 | 4/17/2009 | Null | |
| | EQUI 118 | Null | Limestone Conveyor 3 | Superior | Custom | 800 | tons/hours | Limestone | 4/1/2009 | 4/17/2009 | Null | |
| | EQUI 119 | Null | Limestone Conveyor 4 | Superior | Custom | 800 | tons/hours | Limestone | 4/1/2009 | 4/17/2009 | Null | |
| | EQUI 120 | Null | Limestone Conveyor 5 | Superior | Custom | 800 | tons/hours | Limestone | 4/1/2009 | 4/17/2009 | Null | |
| | EQUI 121 | Null | Limestone Conveyor 6 | Superior | Custom | 800 | tons/hours | Limestone | 4/1/2009 | 4/17/2009 | Null | |
| | EQUI 122 | Null | Limestone Conveyor 7 | Superior | Custom | 800 | tons/hours | Limestone | 4/1/2009 | 4/17/2009 | Null | |
| | EQUI 123 | Null | Limestone Conveyor 8 | Superior | Custom | 800 | tons/hours | Limestone | 4/1/2009 | 4/17/2009 | Null | |
| | EQUI 124 | Null | Limestone Conveyor 9 | Superior | Custom | 800 | tons/hours | Limestone | 4/1/2009 | 4/17/2009 | Null | |
| | EQUI 125 | Null | Limestone Conveyor 10 | Superior | Custom | 800 | tons/hours | Limestone | 4/1/2009 | 4/17/2009 | Null | |
| | EQUI 129 | Null | Screening Conveyor 1 | Superior Minerals | Custom | 400 | tons/hours | Limestone | 4/1/2009 | 4/17/2009 | Null | |
| | EQUI 130 | Null | Screening Conveyor 2 | Superior Minerals | Custom | 400 | tons/hours | Limestone | 4/1/2009 | 4/17/2009 | Null | |
| | EQUI 131 | Null | Pet Coke Unloading to Conveyor 1 | Superior Minerals | Custom | 500 | tons/hours | Coke | 1/1/2015 | 1/1/2015 | Null | |
| | EQUI 132 | Null | Pet Coke Conveyor 1 Transfer Point to Stacker | Superior Minerals | Custom | 500 | tons/hours | Coke | 1/1/2015 | 1/1/2015 | Null | |

Emission Units 3

AI ID (Name): 65 (Superior Minerals Co)

Activity: IND20100001

| SI Type | Subject Item ID | Delta Designation | Description | Manufacturer | Model | Max Design Capacity | Max Design Capacity Units | Material | Construction Start Date | Operation Start Date | Modification Date | |
|------------------------------|-----------------|-------------------|---|----------------------|--------|---------------------|---------------------------|-----------|-------------------------|----------------------|-------------------|--|
| Conveyor | EQUI 133 | Null | Pet Coke Stacker Conveyor Transfer Point 2 | Superior Minerals | Custom | 500 | tons/hours | Coke | 1/1/2015 | 1/1/2015 | Null | |
| | EQUI 134 | Null | Pet Coke Conveyor Transfer Point 3 | Superior Minerals | Custom | 313 | tons/hours | Coke | 1/1/2015 | 1/1/2015 | Null | |
| | EQUI 135 | Null | Pet Coke Front End Loader to Hopper Conveyor System | Superior Minerals | Custom | 500 | tons/hours | Coke | 1/1/2015 | 1/1/2015 | Null | |
| | EQUI 143 | Null | Pet Coke Barge Loading | Custom | Custom | 313 | tons/hours | Coke | 1/1/2015 | 1/1/2015 | Null | |
| Crusher | EQUI 93 | EU130 | Rock Breaker - Stamler | Stamler | Custom | 50 | tons/hours | Limestone | 8/15/1999 | 11/15/1999 | Null | |
| | EQUI 94 | EU131 | Roll Crusher | Modern Process | Custom | 30 | tons/hours | Limestone | 11/1/1998 | 11/1/1998 | Null | |
| Elevator | EQUI 4 | EU003 | Leg #1 14" Bucket Elevator | Larkstur Engineering | Custom | 50 | tons/hours | Limestone | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 7 | EU006 | Leg #2 Bucket Elevator | Larkstur Engineering | Custom | 30 | tons/hours | Limestone | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 8 | EU007 | Leg #3 Bucket Elevator | Larkstur Engineering | Custom | 30 | tons/hours | Limestone | 9/1/1990 | 10/1/1990 | Null | |
| | EQUI 24 | EU025 | Leg #4 Bucket Elevator | Larkstur Engineering | Custom | 75 | tons/hours | Limestone | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 42 | EU069 | Leg L#1 Dryer Discharge Bucket Elevator | Schlagel | Custom | 12 | tons/hours | Limestone | 9/1/2000 | 9/1/2000 | Null | |
| | EQUI 57 | EU044 | Leg B1 Dryer Rock Elevator | Schlagel | Custom | 99 | tons/hours | Limestone | 8/15/1999 | 11/15/1999 | Null | |
| | EQUI 60 | EU053 | Leg #7 Elevator | Schlagel | Custom | 30 | tons/hours | Limestone | 1/1/1998 | 1/1/1998 | Null | |
| | EQUI 63 | EU057 | Leg 2 Bradley Ball Mill Elevator | Chain & Belt Co. | Custom | 12 | tons/hours | Limestone | 7/1/2000 | 7/1/2000 | Null | |
| Filling Operations Equipment | EQUI 126 | Null | Bin 33 Super Sack Filling Station | Tech Packaging Group | Custom | 6 | tons/hours | Limestone | 3/1/2006 | 8/1/2006 | Null | |
| | EQUI 127 | Null | Super Sack Filling Station | Tech Packaging Group | Custom | 6 | tons/hours | Limestone | 3/1/2006 | 8/1/2006 | Null | |
| Hopper | EQUI 53 | EU040 | Dock - Target Hopper | JL White Co | Custom | 800 | tons/hours | Limestone | 3/1/1993 | 5/1/1993 | Null | |
| Loading-Unloading Equipment | EQUI 64 | EU063 | Bin 22 | Saskar | Custom | 3 | tons/hours | Limestone | 4/1/1999 | 4/1/1999 | Null | |
| | EQUI 102 | EU140 | Closed Top Loadout system | Superior Minerals | Custom | 78 | tons/hours | Limestone | 10/1/1987 | 9/1/1988 | Null | |
| Milling Equipment | EQUI 3 | EU002 | Williams Hammernmill | Williams Crusher | Custom | 50 | tons/hours | Limestone | 9/1/1990 | 10/1/1990 | Null | |
| | EQUI 6 | EU005 | Williams Roller Mill & Burner | Williams Co | Custom | 50 | tons/hours | Limestone | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 33 | EU054 | Raymond Roller Mill & Heater | Raymond | Custom | 25 | tons/hours | Limestone | 8/15/1999 | 11/15/1999 | Null | |

Emission Units 3

AI ID (Name): 65 (Superior Minerals Co)

Activity: IND20100001

| SI Type | Subject Item ID | Delta Designation | Description | Manufacturer | Model | Max Design Capacity | Max Design Capacity Units | Material | Construction Start Date | Operation Start Date | Modification Date | |
|----------------------|-----------------|-------------------|--|-----------------------|-----------------|---------------------|---------------------------|-----------|-------------------------|----------------------|-------------------|--|
| Other Emission Unit | EQUI 41 | EU068 | Lehigh Dryer & Heater | Cedar Rapids | Custom | 12 | tons/hours | Limestone | 9/1/2000 | 9/1/2000 | Null | |
| Rolling Equipment | EQUI 29 | EU047 | Bradley Roller Mill Separator & Heater | Bradley | Custom | 50 | tons/hours | Limestone | 8/15/1999 | 11/15/1999 | Null | |
| Screens | EQUI 9 | EU008 | Screen #1 Coarse Screen | J & H Equipment | Custom | 30 | tons/hours | Limestone | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 10 | EU009 | Screen #2 Fines Screen | J & H Equipment | Custom | 50 | tons/hours | Limestone | 12/1/1990 | 1/1/1991 | Null | |
| | EQUI 95 | EU132 | Screener #3 - M Screener | Midwestern Industries | Custom | 30 | tons/hours | Limestone | 1/1/1998 | 1/1/1998 | Null | |
| | EQUI 96 | EU133 | Screener B1 | J&H Equipment | Custom | 50 | tons/hours | Limestone | 11/1/2004 | 11/1/2004 | Null | |
| | EQUI 128 | Null | Triple-Deck Screener | Superior Minerals | Custom | 400 | tons/hours | Limestone | 4/1/2009 | 4/17/2009 | Null | |
| Separation Equipment | EQUI 36 | EU060 | Ultrafine Classifier & Heater | Delta Resources | Custom | 25 | tons/hours | Limestone | 8/1/1999 | 8/1/1999 | Null | |
| | EQUI 81 | EU094 | Bradley Dryer Cyclone B1 | Dustex | Custom | 11 | tons/hours | Limestone | 8/15/1999 | 10/15/1999 | Null | |
| | EQUI 87 | EU100 | Cyclone Bradley B2 | Bradley | Custom | 50 | tons/hours | Limestone | 8/15/1999 | 11/15/1999 | Null | |
| | EQUI 88 | EU101 | Cyclone Bradley B3 | Bradley | Custom | 50 | tons/hours | Limestone | 8/15/1999 | 11/15/1999 | Null | |
| | EQUI 89 | EU102 | Cyclone Raymond R1 | Raymond | Custom | 25 | tons/hours | Limestone | 8/15/1999 | 11/15/1999 | Null | |
| | EQUI 90 | EU103 | Cyclone Williams #1 | Williams Crusher | Custom | 25 | tons/hours | Limestone | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 100 | EU137 | Ultrafines Cyclone - Cyclone #2 | Delta Resources | Custom | 3 | tons/hours | Limestone | 8/1/1999 | 8/1/1999 | Null | |
| | EQUI 104 | EU139 | Classifier W-1 Williams | Williams | Custom | 30 | tons/hours | Limestone | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 144 | Null | Dryer Dust System Vent | Dustex | 3630-14-18 | 20,000 | cubic feet/minutes | Airflow | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 145 | Null | Raymond Mill Dust System | Ultra Industries | BB-25-84-IIG | 16,000 | cubic feet/minutes | Airflow | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 146 | Null | DL60 Powder Loading | Ultra Industries | BB-25-84-IIG | 2,300 | cubic feet/minutes | Airflow | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 147 | Null | Ultrafine Bin Vent System | Ultra Industries | BB-25-84-IIG | 500 | cubic feet/minutes | Airflow | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 148 | Null | Dust System #22 | DCE Volks | DU14RF5 | 7,069 | cubic feet/minutes | Airflow | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 149 | Null | Lehigh Slag Dryer System | Fuller | 34-83-20173-325 | 19,635 | cubic feet/minutes | Airflow | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 150 | Null | Dust System #25 | Mikropul | 64S10TR | 785 | cubic feet/minutes | Airflow | 10/1/1987 | 9/1/1988 | Null | |

Emission Units 3

AI ID (Name): 65 (Superior Minerals Co)

Activity: IND20100001

| SI Type
Separation
Equipment | Subject Item
ID | Delta
Designation | Description | Manufacturer | Model | Max Design
Capacity | Max Design
Capacity
Units | Material | Construction
Start Date | Operation
Start Date | Modification
Date | |
|------------------------------------|--------------------|----------------------|--------------------------------|------------------------|--------------|------------------------|---------------------------------|-----------|----------------------------|-------------------------|----------------------|--|
| | EQUI 151 | Null | Bin 25 Dust System | Ultra Industries | BB-25-84-IIG | 700 | cubic
feet/minutes | Airflow | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 152 | Null | Bin 20 Dust System | Torit | DFT 4-32 | 12,000 | cubic
feet/minutes | Airflow | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 153 | Null | Williams Mill Dust
System | Mikropul | 168S-12-20 | 12,000 | cubic
feet/minutes | Airflow | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 154 | Null | Dust System #2 | Torit | 6120 | 10,000 | cubic
feet/minutes | Airflow | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 155 | Null | Dust System #3 | DEC | DU Series | 12,566 | cubic
feet/minutes | Airflow | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 156 | Null | Dust System #8 | Mikropul | 25S8-20#1 | 785 | cubic
feet/minutes | Airflow | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 157 | Null | Dust System #11 | DCE Volks | DU145RF5 | 700 | cubic
feet/minutes | Airflow | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 158 | Null | Bradley Dolomite
Circuit | Mikropul | 64S10TR | 8,727 | cubic
feet/minutes | Airflow | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 159 | EU098 | Classifier R-1 Raymond
Mill | Delta Resources | Custom | 25 | tons/hours | Limestone | 8/15/1999 | 11/15/1999 | Null | |
| Silo/Bin | EQUI 5 | EU004 | Bin 9 Storage Silo | Charter Inc | Custom | 50 | tons/hours | Limestone | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 11 | EU010 | Bin 15 CC70 | A.O. Smith | Custom | 50 | tons/hours | Limestone | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 12 | EU011 | Bin 6 CC20 | Charter Inc | Custom | 40 | tons/hours | Limestone | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 13 | EU012 | Bin 7 CC30 | Charter Inc | Custom | 40 | tons/hours | Limestone | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 14 | EU013 | Bin 8 CC40 | Charter Inc | Custom | 40 | tons/hours | Limestone | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 15 | EU014 | Bin 12 CC10 | SMC | Custom | 40 | tons/hours | Limestone | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 18 | EU019 | Bin 16 CC70 | Columbia Steel
Tank | Custom | 50 | tons/hours | Limestone | 10/1/1993 | 6/1/1994 | Null | |
| | EQUI 25 | EU026 | Bin 1 CC20 | Charter Inc | Custom | 75 | tons/hours | Limestone | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 26 | EU027 | Bin 2 Shell & Bone | Charter Inc | Custom | 75 | tons/hours | Limestone | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 30 | EU048 | Bin 20 | A.O. Smith | Custom | 50 | tons/hours | Limestone | 4/1/1999 | 4/1/1999 | Null | |
| | EQUI 31 | EU049 | Bin 28 | A.O. Smith | Custom | 50 | tons/hours | Limestone | 10/1/1999 | 10/1/1999 | Null | |
| | EQUI 48 | EU079 | Bin 19 CC70 | A.O. Smith | Custom | 12 | tons/hours | Limestone | 4/1/1999 | 4/1/1999 | Null | |
| | EQUI 50 | EU081 | Bin 21 | Saskar | Custom | 25 | tons/hours | Limestone | 4/1/1999 | 4/1/1999 | Null | |

Emission Units 3

AI ID (Name): 65 (Superior Minerals Co)

Activity: IND20100001

| SI Type
Silo/Bin | Subject Item
ID | Delta
Designation | Description | Manufacturer | Model | Max Design
Capacity | Max Design
Capacity
Units | Material | Construction
Start Date | Operation
Start Date | Modification
Date | |
|---------------------|--------------------|----------------------|--|--------------|--------|------------------------|---------------------------------|-----------|----------------------------|-------------------------|----------------------|--|
| | EQUI 59 | EU052 | Raw Material Bin 26 | Saskar | Custom | 99 | tons/hours | Limestone | 8/1/1999 | 11/1/1999 | Null | |
| | EQUI 61 | EU055 | Bin 18 CC50 | Belgrade | Custom | 40 | tons/hours | Limestone | 8/1/1994 | 8/1/1994 | Null | |
| | EQUI 71 | EU084 | Bin 24 | Saskar | Custom | 25 | tons/hours | Limestone | 4/1/1999 | 4/1/1999 | Null | |
| | EQUI 72 | EU085 | Bin 23 | Saskar | Custom | 75 | tons/hours | Limestone | 4/1/1999 | 4/1/1999 | Null | |
| | EQUI 73 | EU086 | Bin 27 Raymond Mill
Feed | Saskar | Custom | 99 | tons/hours | Limestone | 8/15/1999 | 11/15/1999 | Null | |
| | EQUI 74 | EU087 | Bin 29 Warehouse
Bagger Bin | Saskar | Custom | 8 | tons/hours | Limestone | 8/15/1999 | 11/15/1999 | Null | |
| | EQUI 75 | EU088 | Bin 31 CC70 | A.O. Smith | Custom | 50 | tons/hours | Limestone | 7/1/2000 | 7/1/2000 | Null | |
| | EQUI 76 | EU089 | Bin 32 CC70 | A.O. Smith | Custom | 50 | tons/hours | Limestone | 7/1/2000 | 7/1/2000 | Null | |
| | EQUI 77 | EU090 | Bin 25 Warehouse
Ultrafines | Saskar | Custom | 3 | tons/hours | Limestone | 8/1/1999 | 8/1/1999 | Null | |
| | EQUI 91 | EU104 | Dust system
Transported to Bin 20,
DS-12 | Sutorbilt | Custom | 0.75 | tons/hours | Limestone | 4/1/1999 | 4/1/1999 | Null | |
| | EQUI 98 | EU135 | Transporter Bin 16/28
to Bin 19/20 | Sutorbilt | Custom | 40 | tons/hours | Limestone | 8/15/1999 | 11/15/1999 | Null | |
| | EQUI 99 | EU136 | Transporter Bin 31/32
to Bin 19/10 | Sutorbilt | Custom | 40 | tons/hours | Limestone | 7/1/2000 | 7/1/2000 | Null | |
| | EQUI 105 | EU028 | Bin 3 CC45 | Charter Inc | Custom | 75 | tons/hours | Limestone | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 106 | EU029 | Bin 4 CC70 | Charter Inc | Custom | 75 | tons/hours | Limestone | 10/1/1987 | 9/1/1988 | Null | |
| | EQUI 107 | EU030 | Bin 13 Free Flow | Belgrade | Custom | 75 | tons/hours | Limestone | 5/1/1994 | 6/1/1994 | Null | |
| | EQUI 108 | EU031 | Bin 10 CC70 | Belgrade | Custom | 30 | tons/hours | Limestone | 5/1/1991 | 6/1/1991 | Null | |
| | EQUI 109 | EU032 | Bin 11 | Belgrade | Custom | 30 | tons/hours | Limestone | 5/1/1991 | 6/1/1991 | Null | |
| | EQUI 110 | EU033 | Bin 14 Free Flow | Belgrade | Custom | 75 | tons/hours | Limestone | 5/1/1994 | 6/1/1994 | Null | |
| | EQUI 160 | Null | Bin 34 | CST Storage | NA | 4.6 | tons/hours | Limestone | 1/1/2015 | 1/1/2015 | Null | |

PTE by SI

AI ID (Name): 65 (Superior Minerals Co)

Activity: IND20100001

| SI Category | SI Type | Subject Item ID | Delta Designation | Description | Pollutant | Potential (lbs/hr) | Unrestricted Potential (tons/yr) | Potential Limited (tons/yr) | Actual Emissions (tons/yr) |
|-------------|----------|-----------------|-------------------|--|--------------------|--------------------|----------------------------------|-----------------------------|----------------------------|
| Equipment | Conveyor | EQUI 1 | EU142 | Conveyor W3 Bradley Dryer to Conveyor W2 | Particulate Matter | 0.003 | 1.445 | 0.014 | |
| | | | | | PM < 2.5 micron | 0.001 | 0.53 | 0.005 | |
| | | | | | PM < 10 micron | 0.001 | 0.53 | 0.005 | |
| | | EQUI 2 | EU001 | Conveyor #1 | Particulate Matter | 0.007 | 0.657 | 0.031 | |
| | | | | | PM < 2.5 micron | 0.001 | 0.241 | 0.003 | |
| | | | | | PM < 10 micron | 0.002 | 0.241 | 0.01 | |
| | | EQUI 54 | EU041 | Dryer Feed Belt Conveyor B1 | Particulate Matter | 0.015 | 1.445 | 0.067 | |
| | | | | | PM < 2.5 micron | 0.001 | 0.53 | 0.006 | |
| | | | | | PM < 10 micron | 0.005 | 0.53 | 0.022 | |
| | | EQUI 80 | EU093 | Bradley Conveyor B2 | Particulate Matter | 0.003 | 1.445 | 0.014 | |
| | | | | | PM < 2.5 micron | 0.001 | 0.53 | 0.005 | |
| | | | | | PM < 10 micron | 0.001 | 0.53 | 0.005 | |
| | | EQUI 82 | EU095 | Leg B2 Bradley | Particulate Matter | 0.002 | 0.657 | 0.007 | |
| | | | | | PM < 2.5 micron | 0.001 | 0.241 | 0.002 | |
| | | | | | PM < 10 micron | 0.001 | 0.241 | 0.002 | |
| | | EQUI 86 | EU099 | Conveyor W2 Bradley Dryer to Williams System | Particulate Matter | 0.002 | 0.657 | 0.007 | |
| | | | | | PM < 2.5 micron | 0.001 | 0.241 | 0.002 | |
| | | | | | PM < 10 micron | 0.001 | 0.241 | 0.002 | |
| | | EQUI 92 | EU105 | Leg #8 - Ultrafine Feed | Particulate Matter | 0.001 | 0.329 | 0.003 | |
| | | | | | PM < 2.5 micron | 0.0003 | 0.12 | 0.001 | |
| | | | | | PM < 10 micron | 0.0003 | 0.12 | 0.001 | |
| | | EQUI 101 | EU138 | Conveyor L1 - Lehigh Hopper to Dryer | Particulate Matter | 0.036 | 0.158 | 0.158 | |
| | | | | | PM < 2.5 micron | 0.007 | 0.032 | 0.032 | |
| | | | | | PM < 10 micron | 0.013 | 0.058 | 0.058 | |
| | | EQUI 103 | EU141 | Conveyor L2 | Particulate Matter | 0.002 | 0.158 | 0.007 | |
| | | | | | PM < 2.5 micron | 0.0002 | 0.058 | 0.001 | |
| | | | | | PM < 10 micron | 0.001 | 0.058 | 0.002 | |
| | | EQUI 116 | Null | Limestone Conveyor 1 | Particulate Matter | 0.044 | 4.106 | 0.192 | |
| | | | | | PM < 2.5 micron | 0.004 | 1.506 | 0.018 | |
| | | | | | PM < 10 micron | 0.014 | 1.506 | 0.063 | |
| | | EQUI 118 | Null | Limestone Conveyor 3 | Particulate Matter | 0.044 | 4.106 | 0.192 | |
| | | | | | PM < 2.5 micron | 0.004 | 1.506 | 0.018 | |
| | | | | | PM < 10 micron | 0.014 | 1.506 | 0.063 | |
| | | EQUI 119 | Null | Limestone Conveyor 4 | Particulate Matter | 0.044 | 4.106 | 0.192 | |
| | | | | | PM < 2.5 micron | 0.004 | 1.506 | 0.018 | |
| | | | | | PM < 10 micron | 0.014 | 1.506 | 0.063 | |
| | | EQUI 120 | Null | Limestone Conveyor 5 | Particulate Matter | 0.044 | 4.106 | 0.192 | |
| | | | | | PM < 2.5 micron | 0.004 | 1.506 | 0.018 | |
| | | | | | PM < 10 micron | 0.014 | 1.506 | 0.063 | |
| | | EQUI 121 | Null | Limestone Conveyor 6 | Particulate Matter | 0.044 | 4.106 | 0.192 | |
| | | | | | PM < 2.5 micron | 0.004 | 1.506 | 0.018 | |
| | | | | | PM < 10 micron | 0.014 | 1.506 | 0.063 | |
| | | EQUI 122 | Null | Limestone Conveyor 7 | Particulate Matter | 0.044 | 4.106 | 0.192 | |
| | | | | | PM < 2.5 micron | 0.004 | 1.506 | 0.018 | |
| | | | | | PM < 10 micron | 0.014 | 1.506 | 0.063 | |
| | | EQUI 123 | Null | Limestone Conveyor 8 | Particulate Matter | 0.044 | 4.106 | 0.192 | |
| | | | | | PM < 2.5 micron | 0.004 | 1.506 | 0.018 | |
| | | | | | PM < 10 micron | 0.014 | 1.506 | 0.063 | |
| | | EQUI 124 | Null | Limestone Conveyor 9 | Particulate Matter | 0.044 | 4.106 | 0.192 | |
| | | | | | PM < 2.5 micron | 0.004 | 1.506 | 0.018 | |
| | | | | | PM < 10 micron | 0.014 | 1.506 | 0.063 | |
| | | EQUI 125 | Null | Limestone Conveyor 10 | Particulate Matter | 0.044 | 4.106 | 0.192 | |
| | | | | | PM < 2.5 micron | 0.004 | 1.506 | 0.018 | |
| | | | | | PM < 10 micron | 0.014 | 1.506 | 0.063 | |
| | | EQUI 129 | Null | Screening Conveyor 1 | Particulate Matter | 0.056 | 5.256 | 0.245 | |
| | | | | | PM < 2.5 micron | 0.005 | 1.927 | 0.023 | |
| | | | | | PM < 10 micron | 0.018 | 1.927 | 0.081 | |
| | | EQUI 130 | Null | Screening Conveyor 2 | Particulate Matter | 0.056 | 5.256 | 0.245 | |
| | | | | | PM < 2.5 micron | 0.005 | 1.927 | 0.023 | |
| | | | | | PM < 10 micron | 0.018 | 1.927 | 0.081 | |
| | | EQUI 131 | Null | Pet Coke Unloading to Conveyor 1 | Particulate Matter | 0.732 | 3.208 | 3.208 | |
| | | | | | PM < 2.5 micron | 0.052 | 0.23 | 0.23 | |
| | | | | | PM < 10 micron | 0.346 | 1.517 | 1.517 | |
| | | EQUI 132 | Null | Pet Coke Conveyor 1 Transfer Point to Stack | Particulate Matter | 0.732 | 3.208 | 3.208 | |
| | | | | | PM < 2.5 micron | 0.052 | 0.23 | 0.23 | |
| | | | | | PM < 10 micron | 0.346 | 1.517 | 1.517 | |
| | | EQUI 133 | Null | Pet Coke Stack | Particulate Matter | 0.297 | 1.303 | 1.303 | |
| | | | | | PM < 2.5 micron | 0.021 | 0.093 | 0.093 | |
| | | | | | PM < 10 micron | 0.141 | 0.616 | 0.616 | |
| | | EQUI 134 | Null | Pet Coke Conveyor Transfer Point 3 | Particulate Matter | 0.458 | 2.005 | 2.005 | |
| | | | | | PM < 2.5 micron | 0.033 | 0.144 | 0.144 | |
| | | | | | PM < 10 micron | 0.217 | 0.948 | 0.948 | |

PTE by SI

AI ID (Name): 65 (Superior Minerals Co)
Activity: IND20100001

| SI Category | SI Type | Subject Item ID | Delta Designation | Description | Pollutant | Potential (lbs/hr) | Unrestricted Potential (tons/yr) | Potential Limited (tons/yr) | Actual Emissions (tons/yr) |
|-------------|-----------------------------------|-----------------|-------------------|---|----------------------------|--------------------|----------------------------------|-----------------------------|----------------------------|
| Equipment | Conveyor | EQUI 135 | Null | Pet Coke Front End Loader to Hopper Conveyor System | Particulate Matter | 0.297 | 1.303 | 1.303 | |
| | | | | | PM < 2.5 micron | 0.021 | 0.093 | 0.093 | |
| | | | | | PM < 10 micron | 0.141 | 0.616 | 0.616 | |
| | | EQUI 143 | Null | Pet Coke Barge Loading | Particulate Matter | 0.458 | 2.005 | 2.005 | |
| | | | | | PM < 2.5 micron | 0.033 | 0.144 | 0.144 | |
| | | | | | PM < 10 micron | 0.217 | 0.948 | 0.948 | |
| | Crusher | EQUI 93 | EU130 | Rock Breaker - Stamler | Particulate Matter | 0.06 | 1.183 | 0.263 | |
| | | | | | PM < 2.5 micron | 0.005 | 0.526 | 0.022 | |
| | | | | | PM < 10 micron | 0.027 | 0.526 | 0.118 | |
| | | EQUI 94 | EU131 | Roll Crusher | Particulate Matter | 1.212 | 530.856 | 5.309 | |
| | | | | | PM < 2.5 micron | 0.363 | 22.713 | 1.59 | |
| | | | | | PM < 10 micron | 1.017 | 63.635 | 4.454 | |
| | Dryer/Oven, unknown firing method | EQUI 55 | EU042 | Bradley Rotary Dryer #2 | Arsenic compounds | 0.000192 | 0.000841 | 0.000841 | |
| | | | | | Benzene | 7.34e-05 | 0.000321 | 0.000321 | |
| | | | | | Beryllium | 0.000144 | 0.000631 | 0.000631 | |
| | | | | | Cadmium compounds | 0.000144 | 0.000631 | 0.000631 | |
| | | | | | Carbon Dioxide | 7,827 | 34,280 | 34,280 | |
| | | | | | Carbon Dioxide Equivalent | 7,853 | 34,398 | 34,398 | |
| | | | | | Carbon Monoxide | 1.71 | 7.51 | 7.51 | |
| | | | | | Chromium compounds | 0.000144 | 0.000631 | 0.000631 | |
| | | | | | Ethylbenzene | 2.18e-05 | 9.55e-05 | 9.55e-05 | |
| | | | | | Formaldehyde | 0.0113 | 0.0496 | 0.0496 | |
| | | | | | HAPs - Total | 0.02 | 0.07 | 0.07 | |
| | | | | | Lead | 0.000432 | 0.00189 | 0.00189 | |
| | | | | | Manganese compounds | 0.000288 | 0.00126 | 0.00126 | |
| | | | | | Mercury | 0.000144 | 0.000631 | 0.000631 | |
| | | | | | Methane | 0.317 | 1.39 | 1.39 | |
| | | | | | Nickel compounds | 0.000144 | 0.000631 | 0.000631 | |
| | | | | | Nitrogen Oxides | 6.86 | 30.03 | 30.03 | |
| | | | | | Nitrous Oxide | 0.0635 | 0.278 | 0.278 | |
| | | | | | Particulate Matter | 4.078 | 1,296.184 | 17.872 | |
| | | | | | PM < 2.5 micron | 2.043 | 62.088 | 8.959 | |
| | | | | | PM < 10 micron | 2.736 | 105.45 | 11.994 | |
| | | | | | Polycyclic organic matter | 0.000408 | 0.00179 | 0.00179 | |
| | | | | | Selenium compounds | 0.00072 | 0.00315 | 0.00315 | |
| | | | | | Sulfur Dioxide | 0.07 | 0.32 | 0.32 | |
| | | | | | Toluene | 0.00213 | 0.00931 | 0.00931 | |
| | | | | | Volatile Organic Compounds | 0.09 | 0.38 | 0.38 | |
| | | | | | Xylene (o-) | 3.74e-05 | 0.000164 | 0.000164 | |
| | Elevator | EQUI 4 | EU003 | Leg #1 14" Bucket Elevator | Particulate Matter | 0.002 | 0.657 | 0.007 | |
| | | | | | PM < 2.5 micron | 0.001 | 0.241 | 0.002 | |
| | | | | | PM < 10 micron | 0.001 | 0.241 | 0.002 | |
| | | EQUI 7 | EU006 | Leg #2 Bucket Elevator | Particulate Matter | 0.001 | 0.394 | 0.004 | |
| | | | | | PM < 2.5 micron | 0.0003 | 0.145 | 0.001 | |
| | | | | | PM < 10 micron | 0.0003 | 0.145 | 0.001 | |
| | | EQUI 8 | EU007 | Leg #3 Bucket Elevator | Particulate Matter | 0.001 | 0.394 | 0.004 | |
| | | | | | PM < 2.5 micron | 0.0003 | 0.145 | 0.001 | |
| | | | | | PM < 10 micron | 0.0003 | 0.145 | 0.001 | |
| | | EQUI 24 | EU025 | Leg #4 Bucket Elevator | Particulate Matter | 0.002 | 0.986 | 0.01 | |
| | | | | | PM < 2.5 micron | 0.001 | 0.361 | 0.004 | |
| | | | | | PM < 10 micron | 0.001 | 0.361 | 0.004 | |
| | | EQUI 42 | EU069 | Leg L#1 Dryer Discharge Bucket Elevator | Particulate Matter | 0.0004 | 0.158 | 0.002 | |
| | | | | | PM < 2.5 micron | 0.0001 | 0.058 | 0.001 | |
| | | | | | PM < 10 micron | 0.0001 | 0.058 | 0.001 | |
| | | EQUI 57 | EU044 | Leg B1 Dryer Rock Elevator | Particulate Matter | 0.003 | 1.301 | 0.013 | |
| | | | | | PM < 2.5 micron | 0.001 | 0.477 | 0.005 | |
| | | | | | PM < 10 micron | 0.001 | 0.477 | 0.005 | |
| | | EQUI 60 | EU053 | Leg #7 Elevator | Particulate Matter | 0.001 | 0.394 | 0.004 | |
| | | | | | PM < 2.5 micron | 0.0003 | 0.145 | 0.001 | |
| | | | | | PM < 10 micron | 0.0003 | 0.145 | 0.001 | |
| | | EQUI 63 | EU057 | Leg 2 Bradley Ball Mill Elevator | Particulate Matter | 0.00036 | 0.158 | 0.002 | |
| | | | | | PM < 2.5 micron | 0.000132 | 0.058 | 0.001 | |
| | | | | | PM < 10 micron | 0.000132 | 0.058 | 0.001 | |
| | Filling Operations Equipment | EQUI 126 | Null | Bin 33 Super Sack Filling Station | Particulate Matter | 0.059 | 26.017 | 0.26 | |
| | | | | | PM < 2.5 micron | 0.004 | 0.225 | 0.016 | |
| | | | | | PM < 10 micron | 0.01 | 0.601 | 0.042 | |
| | | EQUI 127 | Null | Super Sack Filling Station | Particulate Matter | 0.059 | 26.017 | 0.26 | |
| | | | | | PM < 2.5 micron | 0.004 | 0.225 | 0.016 | |
| | | | | | PM < 10 micron | 0.01 | 0.601 | 0.042 | |
| | Hopper | EQUI 53 | EU040 | Dock - Target Hopper | Particulate Matter | 0.044 | 4.106 | 0.192 | |
| | | | | | PM < 2.5 micron | 0.004 | 1.506 | 0.018 | |
| | | | | | PM < 10 micron | 0.014 | 1.506 | 0.063 | |

PTE by SI

AI ID (Name): 65 (Superior Minerals Co)
Activity: IND20100001

| SI Category | SI Type | Subject Item ID | Delta Designation | Description | Pollutant | Potential (lbs/hr) | Unrestricted Potential (tons/yr) | Potential Limited (tons/yr) | Actual Emissions (tons/yr) |
|-------------|-----------------------------|-----------------|-------------------|-------------------------------|-----------------------------|--------------------|----------------------------------|-----------------------------|----------------------------|
| Equipment | Loading-Unloading Equipment | EQUI 64 | EU063 | Bin 22 | Particulate Matter | 0.03 | 13.009 | 0.13 | |
| | | | | | PM < 2.5 micron | 0.002 | 0.113 | 0.008 | |
| | | | | | PM < 10 micron | 0.005 | 0.3 | 0.021 | |
| | | EQUI 102 | EU140 | Closed Top Loadout system | Particulate Matter | 0.476 | 208.4 | 2.084 | |
| | | | | | PM < 2.5 micron | 0.476 | 208.4 | 2.084 | |
| | | | | | PM < 10 micron | 0.476 | 208.4 | 2.084 | |
| | Milling Equipment | EQUI 3 | EU002 | Williams Hammermill | Particulate Matter | 0.02 | 8.541 | 0.085 | |
| | | | | | PM < 2.5 micron | 0.008 | 3.285 | 0.033 | |
| | | | | | PM < 10 micron | 0.008 | 3.285 | 0.033 | |
| | | EQUI 6 | EU005 | Williams Roller Mill & Burner | 1,4-Dichlorobenzene (para-) | 1.29e-05 | 5.67e-05 | 5.67e-05 | |
| | | | | | Arsenic compounds | 2.16e-06 | 9.45e-06 | 9.45e-06 | |
| | | | | | Benzene | 2.26e-05 | 9.92e-05 | 9.92e-05 | |
| | | | | | Beryllium | 1.29e-07 | 5.67e-07 | 5.67e-07 | |
| | | | | | Cadmium compounds | 1.19e-05 | 5.2e-05 | 5.2e-05 | |
| | | | | | Carbon Dioxide | 1,287 | 5,636 | 5,636 | |
| | | | | | Carbon Dioxide Equivalent | 1,288 | 5,642 | 5,642 | |
| | | | | | Carbon Monoxide | 0.91 | 3.97 | 3.97 | |
| | | | | | Chromium compounds | 1.51e-05 | 6.61e-05 | 6.61e-05 | |
| | | | | | Cobalt compounds | 9.06e-07 | 3.97e-06 | 3.97e-06 | |
| | | | | | Formaldehyde | 0.000809 | 0.00354 | 0.00354 | |
| | | | | | HAPs - Total | 0.02 | 0.09 | 0.09 | |
| | | | | | Hexane | 0.0194 | 0.085 | 0.085 | |
| | | | | | Lead | 5.39e-06 | 2.36e-05 | 2.36e-05 | |
| | | | | | Manganese compounds | 4.1e-06 | 1.79e-05 | 1.79e-05 | |
| | | | | | Mercury | 2.8e-06 | 1.23e-05 | 1.23e-05 | |
| | | | | | Methane | 0.0243 | 0.106 | 0.106 | |
| | | | | | Nickel compounds | 2.26e-05 | 9.92e-05 | 9.92e-05 | |
| | | | | | Nitrogen Oxides | 1.08 | 4.72 | 4.72 | |
| | | | | | Nitrous Oxide | 0.00243 | 0.0106 | 0.0106 | |
| | | | | | Particulate Matter | 2.1 | 885.12 | 9.208 | |
| | | | | | PM < 2.5 micron | 0.685 | 38.216 | 3.01 | |
| | | | | | PM < 10 micron | 1.775 | 106.419 | 7.784 | |
| | | | | | Polycyclic organic matter | 7.53e-06 | 3.3e-05 | 3.3e-05 | |
| | | | | | Selenium compounds | 2.59e-07 | 1.13e-06 | 1.13e-06 | |
| | | | | | Sulfur Dioxide | 0.01 | 0.03 | 0.03 | |
| | | | | | Toluene | 3.67e-05 | 0.000161 | 0.000161 | |
| | | | | | Volatile Organic Compounds | 0.06 | 0.26 | 0.26 | |
| | | EQUI 33 | EU054 | Raymond Roller Mill & Heater | 1,4-Dichlorobenzene (para-) | 1.06e-05 | 4.64e-05 | 4.64e-05 | |
| | | | | | Arsenic compounds | 1.76e-06 | 7.73e-06 | 7.73e-06 | |
| | | | | | Benzene | 1.85e-05 | 8.12e-05 | 8.12e-05 | |
| | | | | | Beryllium | 1.06e-07 | 4.64e-07 | 4.64e-07 | |
| | | | | | Cadmium compounds | 9.71e-06 | 4.25e-05 | 4.25e-05 | |
| | | | | | Carbon Dioxide | 1,053 | 4,611 | 4,611 | |
| | | | | | Carbon Dioxide Equivalent | 1,054 | 4,616 | 4,616 | |
| | | | | | Carbon Monoxide | 0.74 | 3.25 | 3.25 | |
| | | | | | Chromium compounds | 1.24e-05 | 5.41e-05 | 5.41e-05 | |
| | | | | | Cobalt compounds | 7.41e-07 | 3.25e-06 | 3.25e-06 | |
| | | | | | Formaldehyde | 0.000662 | 0.0029 | 0.0029 | |
| | | | | | HAPs - Total | 0.02 | 0.07 | 0.07 | |
| | | | | | Hexane | 0.0159 | 0.0696 | 0.0696 | |
| | | | | | Lead | 4.41e-06 | 1.93e-05 | 1.93e-05 | |
| | | | | | Manganese compounds | 3.35e-06 | 1.47e-05 | 1.47e-05 | |
| | | | | | Mercury | 2.29e-06 | 1e-05 | 1e-05 | |
| | | | | | Methane | 0.0198 | 0.0869 | 0.0869 | |
| | | | | | Nickel compounds | 1.85e-05 | 8.12e-05 | 8.12e-05 | |
| | | | | | Nitrogen Oxides | 0.88 | 3.86 | 3.86 | |
| | | | | | Nitrous Oxide | 0.00198 | 0.00869 | 0.00869 | |
| | | | | | Particulate Matter | 1.08 | 442.67 | 4.714 | |
| | | | | | PM < 2.5 micron | 0.373 | 19.218 | 1.615 | |
| | | | | | PM < 10 micron | 0.918 | 53.319 | 4.002 | |
| | | | | | Polycyclic organic matter | 6.16e-06 | 2.7e-05 | 2.7e-05 | |
| | | | | | Selenium compounds | 2.12e-07 | 9.28e-07 | 9.28e-07 | |
| | | | | | Sulfur Dioxide | 0.01 | 0.02 | 0.02 | |
| | | | | | Toluene | 3e-05 | 0.000131 | 0.000131 | |
| | | | | | Volatile Organic Compounds | 0.05 | 0.21 | 0.21 | |
| | Other Emission Unit | EQUI 41 | EU068 | Lehigh Dryer & Heater | 1,4-Dichlorobenzene (para-) | 2e-05 | 8.76e-05 | 8.76e-05 | |
| | | | | | Arsenic compounds | 3.33e-06 | 1.46e-05 | 1.46e-05 | |
| | | | | | Benzene | 3.5e-05 | 0.000153 | 0.000153 | |
| | | | | | Beryllium | 2e-07 | 8.76e-07 | 8.76e-07 | |
| | | | | | Cadmium compounds | 1.83e-05 | 8.03e-05 | 8.03e-05 | |
| | | | | | Carbon Dioxide | 1,989 | 8,710 | 8,710 | |
| | | | | | Carbon Dioxide Equivalent | 1,991 | 8,719 | 8,719 | |

PTE by SI

AI ID (Name): 65 (Superior Minerals Co)
Activity: IND20100001

| SI Category | SI Type | Subject Item ID | Delta Designation | Description | Pollutant | Potential (lbs/hr) | Unrestricted Potential (tons/yr) | Potential Limited (tons/yr) | Actual Emissions (tons/yr) |
|-------------|----------------------|-----------------|-------------------|--|-----------------------------|--------------------|----------------------------------|-----------------------------|----------------------------|
| Equipment | Other Emission Unit | EQUI 41 | EU068 | Lehigh Dryer & Heater | Carbon Monoxide | 1.4 | 6.13 | 6.13 | |
| | | | | | Chromium compounds | 2.33e-05 | 0.000102 | 0.000102 | |
| | | | | | Cobalt compounds | 1.4e-06 | 6.13e-06 | 6.13e-06 | |
| | | | | | Formaldehyde | 0.00125 | 0.00548 | 0.00548 | |
| | | | | | HAPs - Total | 0.03 | 0.14 | 0.14 | |
| | | | | | Hexane | 0.03 | 0.131 | 0.131 | |
| | | | | | Lead | 8.33e-06 | 3.65e-05 | 3.65e-05 | |
| | | | | | Manganese compounds | 6.33e-06 | 2.77e-05 | 2.77e-05 | |
| | | | | | Mercury | 4.33e-06 | 1.9e-05 | 1.9e-05 | |
| | | | | | Methane | 0.0375 | 0.164 | 0.164 | |
| | | | | | Nickel compounds | 3.5e-05 | 0.000153 | 0.000153 | |
| | | | | | Nitrogen Oxides | 1.67 | 7.3 | 7.3 | |
| | | | | | Nitrous Oxide | 0.00375 | 0.0164 | 0.0164 | |
| | | | | | Particulate Matter | 0.452 | 141.411 | 1.959 | |
| | | | | | PM < 2.5 micron | 0.23 | 6.782 | 0.986 | |
| | | | | | PM < 10 micron | 0.305 | 11.513 | 1.317 | |
| | | | | | Polycyclic organic matter | 1.16e-05 | 5.1e-05 | 5.1e-05 | |
| | | | | | Selenium compounds | 4e-07 | 1.75e-06 | 1.75e-06 | |
| | | | | | Sulfur Dioxide | 0.01 | 0.04 | 0.04 | |
| | | | | | Toluene | 5.67e-05 | 0.000248 | 0.000248 | |
| | | | | | Volatile Organic Compounds | 0.09 | 0.4 | 0.4 | |
| | Rolling Equipment | EQUI 29 | EU047 | Bradley Roller Mill Separator & Heater | 1,4-Dichlorobenzene (para-) | 1.76e-05 | 7.73e-05 | 7.73e-05 | |
| | | | | | Arsenic compounds | 2.94e-06 | 1.29e-05 | 1.29e-05 | |
| | | | | | Benzene | 3.09e-05 | 0.000135 | 0.000135 | |
| | | | | | Beryllium | 1.76e-07 | 7.73e-07 | 7.73e-07 | |
| | | | | | Cadmium compounds | 1.62e-05 | 7.09e-05 | 7.09e-05 | |
| | | | | | Carbon Dioxide | 1,755 | 7,685 | 7,685 | |
| | | | | | Carbon Dioxide Equivalent | 1,756 | 7,693 | 7,693 | |
| | | | | | Carbon Monoxide | 1.24 | 5.41 | 5.41 | |
| | | | | | Chromium compounds | 2.06e-05 | 9.02e-05 | 9.02e-05 | |
| | | | | | Cobalt compounds | 1.24e-06 | 5.41e-06 | 5.41e-06 | |
| | | | | | Formaldehyde | 0.0011 | 0.00483 | 0.00483 | |
| | | | | | HAPs - Total | 0.03 | 0.12 | 0.12 | |
| | | | | | Hexane | 0.0265 | 0.116 | 0.116 | |
| | | | | | Lead | 7.35e-06 | 3.22e-05 | 3.22e-05 | |
| | | | | | Manganese compounds | 5.59e-06 | 2.45e-05 | 2.45e-05 | |
| | | | | | Mercury | 3.82e-06 | 1.67e-05 | 1.67e-05 | |
| | | | | | Methane | 0.0331 | 0.145 | 0.145 | |
| | | | | | Nickel compounds | 3.09e-05 | 0.000135 | 0.000135 | |
| | | | | | Nitrogen Oxides | 1.47 | 6.44 | 6.44 | |
| | | | | | Nitrous Oxide | 0.00331 | 0.0145 | 0.0145 | |
| | | | | | Particulate Matter | 2.13 | 885.25 | 9.338 | |
| | | | | | PM < 2.5 micron | 0.715 | 38.346 | 3.14 | |
| | | | | | PM < 10 micron | 1.805 | 106.549 | 7.914 | |
| | | | | | Polycyclic organic matter | 1.03e-05 | 4.5e-05 | 4.5e-05 | |
| | | | | | Selenium compounds | 3.53e-07 | 1.55e-06 | 1.55e-06 | |
| | | | | | Sulfur Dioxide | 0.01 | 0.04 | 0.04 | |
| | | | | | Toluene | 5e-05 | 0.000219 | 0.000219 | |
| | | | | | Volatile Organic Compounds | 0.08 | 0.35 | 0.35 | |
| | Screens | EQUI 9 | EU008 | Screen #1 Coarse Screen | Particulate Matter | 0.09 | 39.42 | 0.394 | |
| | | | | | PM < 2.5 micron | 0.022 | 9.461 | 0.095 | |
| | | | | | PM < 10 micron | 0.022 | 9.461 | 0.095 | |
| | | EQUI 10 | EU009 | Screen #2 Fines Screen | Particulate Matter | 0.15 | 65.7 | 0.657 | |
| | | | | | PM < 2.5 micron | 0.036 | 15.768 | 0.158 | |
| | | | | | PM < 10 micron | 0.036 | 15.768 | 0.158 | |
| | | EQUI 95 | EU132 | Screener #3 - M Screener | Particulate Matter | 0.09 | 39.42 | 0.394 | |
| | | | | | PM < 2.5 micron | 0.022 | 9.461 | 0.095 | |
| | | | | | PM < 10 micron | 0.022 | 9.461 | 0.095 | |
| | | EQUI 96 | EU133 | Screener B1 | Particulate Matter | 0.15 | 65.7 | 0.657 | |
| | | | | | PM < 2.5 micron | 0.036 | 15.768 | 0.158 | |
| | | | | | PM < 10 micron | 0.036 | 15.768 | 0.158 | |
| | | EQUI 128 | Null | Triple-Deck Screener | Particulate Matter | 0.88 | 43.8 | 3.854 | |
| | | | | | PM < 2.5 micron | 0.296 | 15.242 | 1.296 | |
| | | | | | PM < 10 micron | 0.296 | 15.242 | 1.296 | |
| | Separation Equipment | EQUI 36 | EU060 | Ultrafine Classifier & Heater | 1,4-Dichlorobenzene (para-) | 2.35e-06 | 1.03e-05 | 1.03e-05 | |
| | | | | | Arsenic compounds | 3.92e-07 | 1.72e-06 | 1.72e-06 | |
| | | | | | Benzene | 4.12e-06 | 1.8e-05 | 1.8e-05 | |
| | | | | | Beryllium | 2.35e-08 | 1.03e-07 | 1.03e-07 | |
| | | | | | Cadmium compounds | 2.16e-06 | 9.45e-06 | 9.45e-06 | |
| | | | | | Carbon Dioxide | 234 | 1,025 | 1,025 | |
| | | | | | Carbon Dioxide Equivalent | 234 | 1,026 | 1,026 | |
| | | | | | Carbon Monoxide | 0.16 | 0.72 | 0.72 | |

PTE by SI

AI ID (Name): 65 (Superior Minerals Co)
Activity: IND20100001

| SI Category | SI Type | Subject Item ID | Delta Designation | Description | Pollutant | Potential (lbs/hr) | Unrestricted Potential (tons/yr) | Potential Limited (tons/yr) | Actual Emissions (tons/yr) |
|-------------|----------------------|-----------------|-------------------|---------------------------------|----------------------------|--------------------|----------------------------------|-----------------------------|----------------------------|
| Equipment | Separation Equipment | EQUI 36 | EU060 | Ultrafine Classifier & Heater | Chromium compounds | 2.75e-06 | 1.2e-05 | 1.2e-05 | |
| | | | | | Cobalt compounds | 1.65e-07 | 7.21e-07 | 7.21e-07 | |
| | | | | | Formaldehyde | 0.000147 | 0.000644 | 0.000644 | |
| | | | | | HAPs - Total | 0.004 | 0.02 | 0.02 | |
| | | | | | Hexane | 0.00353 | 0.0155 | 0.0155 | |
| | | | | | Lead | 9.8e-07 | 4.29e-06 | 4.29e-06 | |
| | | | | | Manganese compounds | 7.45e-07 | 3.26e-06 | 3.26e-06 | |
| | | | | | Mercury | 5.1e-07 | 2.23e-06 | 2.23e-06 | |
| | | | | | Methane | 0.00441 | 0.0193 | 0.0193 | |
| | | | | | Nickel compounds | 4.12e-06 | 1.8e-05 | 1.8e-05 | |
| | | | | | Nitrogen Oxides | 0.2 | 0.86 | 0.86 | |
| | | | | | Nitrous Oxide | 0.000441 | 0.00193 | 0.00193 | |
| | | | | | Particulate Matter | 0.573 | 246.445 | 2.534 | |
| | | | | | PM < 2.5 micron | 0.113 | 6.484 | 0.519 | |
| | | | | | PM < 10 micron | 0.27 | 16.339 | 1.209 | |
| | | | | | Polycyclic organic matter | 1.37e-06 | 6e-06 | 6e-06 | |
| | | | | | Selenium compounds | 4.71e-08 | 2.06e-07 | 2.06e-07 | |
| | | | | | Sulfur Dioxide | 0.0012 | 0.01 | 0.01 | |
| | | | | | Toluene | 6.67e-06 | 2.92e-05 | 2.92e-05 | |
| | | | | | Volatile Organic Compounds | 0.01 | 0.05 | 0.05 | |
| | | EQUI 81 | EU094 | Bradley Dryer Cyclone B1 | Particulate Matter | 0.248 | 108.405 | 1.084 | |
| | | | | | PM < 2.5 micron | 0.045 | 2.822 | 0.198 | |
| | | | | | PM < 10 micron | 0.114 | 7.158 | 0.501 | |
| | | EQUI 87 | EU100 | Cyclone Bradley B2 | Particulate Matter | 1.125 | 492.75 | 4.928 | |
| | | | | | PM < 2.5 micron | 0.205 | 12.827 | 0.898 | |
| | | | | | PM < 10 micron | 0.52 | 32.537 | 2.278 | |
| | | EQUI 89 | EU102 | Cyclone Raymond R1 | Particulate Matter | 0.563 | 246.375 | 2.464 | |
| | | | | | PM < 2.5 micron | 0.103 | 6.414 | 0.449 | |
| | | | | | PM < 10 micron | 0.26 | 16.269 | 1.139 | |
| | | EQUI 90 | EU103 | Cyclone Williams #1 | Particulate Matter | 0.563 | 246.375 | 2.464 | |
| | | | | | PM < 2.5 micron | 0.103 | 6.414 | 0.449 | |
| | | | | | PM < 10 micron | 0.26 | 16.269 | 1.139 | |
| | | EQUI 100 | EU137 | Ultrafines Cyclone - Cyclone #2 | Particulate Matter | 0.068 | 29.565 | 0.296 | |
| | | | | | PM < 2.5 micron | 0.012 | 0.77 | 0.054 | |
| | | | | | PM < 10 micron | 0.031 | 1.952 | 0.137 | |
| | | EQUI 104 | EU139 | Classifier W-1 Williams | Particulate Matter | 0.675 | 295.65 | 2.957 | |
| | | | | | PM < 2.5 micron | 0.123 | 7.696 | 0.539 | |
| | | | | | PM < 10 micron | 0.312 | 19.522 | 1.367 | |
| | | EQUI 159 | EU098 | Classifier R-1 Raymond Mill | Particulate Matter | 0.563 | 246.375 | 2.464 | |
| | | | | | PM < 2.5 micron | 0.103 | 6.414 | 0.449 | |
| | | | | | PM < 10 micron | 0.26 | 16.269 | 1.139 | |
| | Silo/Bin | EQUI 5 | EU004 | Bin 9 Storage Silo | Particulate Matter | 0.002 | 0.657 | 0.007 | |
| | | | | | PM < 2.5 micron | 0.001 | 0.241 | 0.002 | |
| | | | | | PM < 10 micron | 0.001 | 0.241 | 0.002 | |
| | | EQUI 11 | EU010 | Bin 15 CC70 | Particulate Matter | 0.495 | 216.81 | 2.168 | |
| | | | | | PM < 2.5 micron | 0.03 | 1.877 | 0.131 | |
| | | | | | PM < 10 micron | 0.08 | 5.006 | 0.35 | |
| | | EQUI 12 | EU011 | Bin 6 CC20 | Particulate Matter | 0.396 | 173.448 | 1.734 | |
| | | | | | PM < 2.5 micron | 0.024 | 1.502 | 0.105 | |
| | | | | | PM < 10 micron | 0.064 | 4.005 | 0.28 | |
| | | EQUI 13 | EU012 | Bin 7 CC30 | Particulate Matter | 0.396 | 173.448 | 1.734 | |
| | | | | | PM < 2.5 micron | 0.024 | 1.502 | 0.105 | |
| | | | | | PM < 10 micron | 0.064 | 4.005 | 0.28 | |
| | | EQUI 14 | EU013 | Bin 8 CC40 | Particulate Matter | 0.396 | 173.448 | 1.734 | |
| | | | | | PM < 2.5 micron | 0.024 | 1.502 | 0.105 | |
| | | | | | PM < 10 micron | 0.064 | 4.005 | 0.28 | |
| | | EQUI 15 | EU014 | Bin 12 CC10 | Particulate Matter | 0.396 | 173.448 | 1.734 | |
| | | | | | PM < 2.5 micron | 0.024 | 1.502 | 0.105 | |
| | | | | | PM < 10 micron | 0.064 | 4.005 | 0.28 | |
| | | EQUI 18 | EU019 | Bin 16 CC70 | Particulate Matter | 0.005 | 216.81 | 0.022 | |
| | | | | | PM < 2.5 micron | 0.0003 | 1.877 | 0.001 | |
| | | | | | PM < 10 micron | 0.001 | 5.006 | 0.004 | |
| | | EQUI 25 | EU026 | Bin 1 CC20 | Particulate Matter | 0.743 | 325.215 | 3.252 | |
| | | | | | PM < 2.5 micron | 0.045 | 2.816 | 0.197 | |
| | | | | | PM < 10 micron | 0.12 | 7.509 | 0.526 | |
| | | EQUI 30 | EU048 | Bin 20 | Particulate Matter | 0.005 | 216.81 | 0.022 | |
| | | | | | PM < 2.5 micron | 0.0003 | 13.14 | 0.001 | |
| | | | | | PM < 10 micron | 0.001 | 35.04 | 0.004 | |
| | | EQUI 31 | EU049 | Bin 28 | Particulate Matter | 0.005 | 216.81 | 0.022 | |
| | | | | | PM < 2.5 micron | 0.0003 | 1.877 | 0.001 | |
| | | | | | PM < 10 micron | 0.001 | 5.006 | 0.004 | |
| | | EQUI 48 | EU079 | Bin 19 CC70 | Particulate Matter | 0.119 | 52.034 | 0.52 | |

PTE by SI

AI ID (Name): 65 (Superior Minerals Co)
Activity: IND20100001

| SI Category | SI Type | Subject Item ID | Delta Designation | Description | Pollutant | Potential (lbs/hr) | Unrestricted Potential (tons/yr) | Potential Limited (tons/yr) | Actual Emissions (tons/yr) |
|-------------|--------------------------------------|-----------------|-------------------|---|--------------------|--------------------|----------------------------------|-----------------------------|----------------------------|
| Equipment | Silo/Bin | EQUI 48 | EU079 | Bin 19 CC70 | PM < 2.5 micron | 0.007 | 0.451 | 0.032 | |
| | | | | | PM < 10 micron | 0.019 | 1.201 | 0.084 | |
| | | EQUI 50 | EU081 | Bin 21 | Particulate Matter | 0.248 | 108.405 | 1.084 | |
| | | | | | PM < 2.5 micron | 0.015 | 0.939 | 0.066 | |
| | | | | | PM < 10 micron | 0.04 | 2.503 | 0.175 | |
| | | EQUI 59 | EU052 | Raw Material Bin 26 | Particulate Matter | 0.003 | 1.301 | 0.013 | |
| | | | | | PM < 2.5 micron | 0.001 | 0.477 | 0.005 | |
| | | | | | PM < 10 micron | 0.001 | 0.477 | 0.005 | |
| | | EQUI 71 | EU084 | Bin 24 | Particulate Matter | 0.248 | 108.405 | 1.084 | |
| | | | | | PM < 2.5 micron | 0.015 | 0.939 | 0.066 | |
| | | | | | PM < 10 micron | 0.04 | 2.503 | 0.175 | |
| | | EQUI 73 | EU086 | Bin 27 Raymond Mill Feed | Particulate Matter | 0.003 | 1.301 | 0.013 | |
| | | | | | PM < 2.5 micron | 0.001 | 0.477 | 0.005 | |
| | | | | | PM < 10 micron | 0.001 | 0.477 | 0.005 | |
| | | EQUI 74 | EU087 | Bin 29 Warehouse Bagger Bin | Particulate Matter | 0.079 | 34.69 | 0.347 | |
| | | | | | PM < 2.5 micron | 0.005 | 0.3 | 0.021 | |
| | | | | | PM < 10 micron | 0.013 | 0.801 | 0.056 | |
| | | EQUI 75 | EU088 | Bin 31 CC70 | Particulate Matter | 0.495 | 216.81 | 2.168 | |
| | | | | | PM < 2.5 micron | 0.03 | 1.877 | 0.131 | |
| | | | | | PM < 10 micron | 0.08 | 5.006 | 0.35 | |
| | | EQUI 76 | EU089 | Bin 32 CC70 | Particulate Matter | 0.495 | 216.81 | 2.168 | |
| | | | | | PM < 2.5 micron | 0.03 | 1.877 | 0.131 | |
| | | | | | PM < 10 micron | 0.08 | 5.006 | 0.35 | |
| | | EQUI 77 | EU090 | Bin 25 Warehouse Ultrafines | Particulate Matter | 0.03 | 13.009 | 0.13 | |
| | | | | | PM < 2.5 micron | 0.002 | 0.113 | 0.008 | |
| | | | | | PM < 10 micron | 0.005 | 0.3 | 0.021 | |
| | | EQUI 91 | EU104 | Dust system Transported to Bin 20, DS-12 | Particulate Matter | 0.007 | 3.252 | 0.033 | |
| | | | | | PM < 2.5 micron | 0.0004 | 0.028 | 0.002 | |
| | | | | | PM < 10 micron | 0.001 | 0.075 | 0.005 | |
| | | EQUI 98 | EU135 | Transporter Bin 16/28 to Bin 19/20 | Particulate Matter | 0.396 | 173.448 | 1.734 | |
| | | | | | PM < 2.5 micron | 0.024 | 1.502 | 0.105 | |
| | | | | | PM < 10 micron | 0.064 | 4.005 | 0.28 | |
| | | EQUI 99 | EU136 | Transporter Bin 31/32 to Bin 19/10 | Particulate Matter | 0.396 | 173.448 | 1.734 | |
| | | | | | PM < 2.5 micron | 0.024 | 1.502 | 0.105 | |
| | | | | | PM < 10 micron | 0.064 | 4.005 | 0.28 | |
| | | EQUI 106 | EU029 | Bin 4 CC70 | Particulate Matter | 0.495 | 216.81 | 2.168 | |
| | | | | | PM < 2.5 micron | 0.03 | 1.877 | 0.131 | |
| | | | | | PM < 10 micron | 0.08 | 5.006 | 0.35 | |
| | | EQUI 108 | EU031 | Bin 10 CC70 | Particulate Matter | 0.297 | 130.086 | 1.301 | |
| | | | | | PM < 2.5 micron | 0.018 | 1.126 | 0.079 | |
| | | | | | PM < 10 micron | 0.048 | 3.003 | 0.21 | |
| | | EQUI 109 | EU032 | Bin 11 | Particulate Matter | 0.297 | 130.086 | 1.301 | |
| | | | | | PM < 2.5 micron | 0.018 | 1.126 | 0.079 | |
| | | | | | PM < 10 micron | 0.048 | 3.003 | 0.21 | |
| | | EQUI 160 | Null | Bin 34 | Particulate Matter | 0.0452 | 19.8 | 0.2 | |
| | | | | | PM < 2.5 micron | 0.00274 | 0.17 | 0.01 | |
| | | | | | PM < 10 micron | 0.00731 | 0.46 | 0.03 | |
| Fugitive | Material Handling/ Transfer/ Storage | FUGI 43 | Null | Front End Loader - Roller Mill/Ball Mill | Particulate Matter | 0.915 | 4.007 | 4.007 | |
| | | | | | PM < 2.5 micron | 0.028 | 0.124 | 0.124 | |
| | | | | | PM < 10 micron | 0.28 | 1.227 | 1.227 | |
| | | FUGI 44 | Null | Feed Hopper - Roller Mill (Raymond, Williams and Bradley) | Particulate Matter | 0.22 | 0.98 | 0.98 | |
| | | | | | PM < 2.5 micron | 0.02 | 0.07 | 0.07 | |
| | | | | | PM < 10 micron | 0.1 | 0.47 | 0.47 | |
| | | FUGI 45 | Null | Uncaptured emissions from Truck (Hopper) Loader | Particulate Matter | 0.6 | 2.74 | 2.74 | |
| | | | | | PM < 2.5 micron | 0.6 | 2.74 | 2.74 | |
| | | | | | PM < 10 micron | 0.6 | 2.74 | 2.74 | |
| | | FUGI 47 | Null | 12' Hopper - River Dock Unloading | Particulate Matter | 0.69 | 1.07 | 1.07 | |
| | | | | | PM < 2.5 micron | 0.05 | 0.08 | 0.08 | |
| | | | | | PM < 10 micron | 0.08 | 0.13 | 0.13 | |
| | | FUGI 48 | Null | Asphalt Pad Truck Loadout | Particulate Matter | 0.24 | 1.03 | 1.03 | |
| | | | | | PM < 2.5 micron | 0.02 | 0.07 | 0.07 | |
| | | | | | PM < 10 micron | 0.11 | 0.49 | 0.49 | |
| | | FUGI 49 | Null | Front End Loader - Small | Particulate Matter | 0.035 | 0.15 | 0.15 | |
| | | | | | PM < 2.5 micron | 0.002 | 0.004 | 0.004 | |
| | | | | | PM < 10 micron | 0.011 | 0.047 | 0.047 | |
| | | FUGI 50 | Null | Screened Material Loader | Particulate Matter | 0.69 | 3.02 | 3.02 | |
| | | | | | PM < 2.5 micron | 0.05 | 0.22 | 0.22 | |
| | | | | | PM < 10 micron | 0.33 | 1.43 | 1.43 | |
| | | FUGI 51 | Null | Feed Hopper - Lehigh Mill | Particulate Matter | 0.02 | 0.09 | 0.09 | |
| | | | | | PM < 2.5 micron | 0.0001 | 0.01 | 0.01 | |
| | | | | | PM < 10 micron | 0.01 | 0.04 | 0.04 | |
| | | FUGI 52 | Null | Pile Unloading | Particulate Matter | 0.71 | 1.96 | 1.96 | |

PTE by SI

AI ID (Name): 65 (Superior Minerals Co)
Activity: IND20100001

| SI Category | SI Type | Subject Item ID | Delta Designation | Description | Pollutant | Potential (lbs/hr) | Unrestricted Potential (tons/yr) | Potential Limited (tons/yr) | Actual Emissions (tons/yr) |
|-------------|-----------------------------|-----------------|-------------------|---------------------------------------|--------------------|--------------------|----------------------------------|-----------------------------|----------------------------|
| Fugitive | Handling/ Transfer/ Storage | FUGI 52 | Null | Pile Unloading | PM < 2.5 micron | 0.05 | 0.14 | 0.14 | |
| | | | | | PM < 10 micron | 0.34 | 0.92 | 0.92 | |
| | Paved Road | FUGI 87 | Null | Paved Road Pet Coke to Unloading Area | Particulate Matter | 0.16 | 7.52 | 0.69 | |
| | | | | | PM < 2.5 micron | 0.007 | 0.37 | 0.03 | |
| | | | | | PM < 10 micron | 0.03 | 1.5 | 0.14 | |
| | | FUGI 88 | Null | Paved Road Pet Coke Loader | Particulate Matter | 0.02 | 1.08 | 0.07 | |
| | | | | | PM < 2.5 micron | 0.0007 | 0.05 | 0.003 | |
| | | | | | PM < 10 micron | 0.002 | 0.22 | 0.01 | |
| | Piles | FUGI 46 | Null | Piles - Wind Erosion | Particulate Matter | 0.6 | 2.66 | 2.66 | |
| | | | | | PM < 2.5 micron | 0.6 | 2.66 | 2.66 | |
| | | | | | PM < 10 micron | 0.6 | 2.66 | 2.66 | |
| | | FUGI 89 | Null | Pet Coke Storage Pile | Particulate Matter | 0.03 | 0.13 | 0.13 | |
| | | | | | PM < 2.5 micron | 0.002 | 0.01 | 0.01 | |
| | | | | | PM < 10 micron | 0.02 | 0.07 | 0.07 | |

Relationships

AI ID (Name): 65 (Superior Minerals Co)

Activity: IND20100001

| SI Category | SI Type | Subject Item ID | Delta Designation | Description | Relationship | Related SI ID | % Flow | Related SI Type | Related Delta Designation | Relationship Start Date | Relationship End Date | |
|-------------|-----------------------------------|-----------------|-------------------|--|--------------|---------------|--------|----------------------|---------------------------|-------------------------|-----------------------|--|
| Equipment | Conveyor | EQUI 1 | EU142 | Conveyor W3 Bradley Dryer to Conveyor W2 | sends to | EQUI 144 | 100 | Separation Equipment | Null | 10/1/1990 | Null | |
| | | | | | | STRU 1 | 100 | Stack/Vent | SV014 | 10/1/1990 | Null | |
| | | EQUI 80 | EU093 | Bradley Conveyor B2 | sends to | EQUI 144 | 100 | Separation Equipment | Null | 10/1/2004 | Null | |
| | | | | | | STRU 1 | 100 | Stack/Vent | SV014 | 10/1/2004 | Null | |
| | | EQUI 82 | EU095 | Leg B2 Bradley | sends to | EQUI 144 | 50 | Separation Equipment | Null | 10/15/1999 | Null | |
| | | | | | | EQUI 145 | 50 | Separation Equipment | Null | 10/15/1999 | Null | |
| | | | | | | STRU 1 | 50 | Stack/Vent | SV014 | 10/15/1999 | Null | |
| | | | | | | STRU 3 | 50 | Stack/Vent | SV016 | 10/15/1999 | Null | |
| | | EQUI 86 | EU099 | Conveyor W2 Bradley Dryer to Williams System | sends to | EQUI 153 | 100 | Separation Equipment | Null | 10/1/2003 | Null | |
| | | | | | | STRU 16 | 100 | Stack/Vent | SV001 | 10/1/2003 | Null | |
| | | EQUI 92 | EU105 | Leg #8 - Ultrafine Feed | sends to | EQUI 154 | 100 | Separation Equipment | Null | 8/1/1999 | Null | |
| | | | | | | STRU 17 | 100 | Stack/Vent | SV002 | 8/1/1999 | Null | |
| | | EQUI 101 | EU138 | Conveyor L1 - Lehigh Hopper to Dryer | sends to | EQUI 147 | 50 | Separation Equipment | Null | 9/1/2000 | Null | |
| | | | | | | EQUI 151 | 50 | Separation Equipment | Null | 9/1/2000 | Null | |
| | | | | | | STRU 6 | 50 | Stack/Vent | SV019 | 9/1/2000 | Null | |
| | | | | | | STRU 13 | 50 | Stack/Vent | SV026 | 9/1/2000 | Null | |
| | Crusher | EQUI 94 | EU131 | Roll Crusher | sends to | EQUI 154 | 100 | Separation Equipment | Null | 11/1/1998 | Null | |
| | | | | | | STRU 17 | 100 | Stack/Vent | SV002 | 11/1/1998 | Null | |
| | Dryer/Oven, unknown firing method | EQUI 55 | EU042 | Bradley Rotary Dryer #2 | sends to | EQUI 144 | 100 | Separation Equipment | Null | 8/1/1994 | Null | |
| | | | | | | STRU 1 | 100 | Stack/Vent | SV014 | 8/1/1994 | Null | |
| | Elevator | EQUI 4 | EU003 | Leg #1 14" Bucket Elevator | sends to | EQUI 153 | 100 | Separation Equipment | Null | 9/1/1988 | Null | |
| | | | | | | STRU 16 | 100 | Stack/Vent | SV001 | 9/1/1988 | Null | |
| | | EQUI 7 | EU006 | Leg #2 Bucket Elevator | sends to | EQUI 153 | 33 | Separation Equipment | Null | 9/1/1988 | Null | |
| | | | | | | EQUI 154 | 33 | Separation Equipment | Null | 9/1/1988 | Null | |
| | | | | | | EQUI 155 | 33 | Separation Equipment | Null | 9/1/1988 | Null | |
| | | | | | | STRU 16 | 33 | Stack/Vent | SV001 | 9/1/1988 | Null | |
| | | | | | | STRU 17 | 33 | Stack/Vent | SV002 | 9/1/1988 | Null | |
| | | | | | | STRU 18 | 33 | Stack/Vent | SV003 | 3/15/2006 | Null | |
| | | EQUI 8 | EU007 | Leg #3 Bucket Elevator | sends to | EQUI 154 | 100 | Separation Equipment | Null | 10/1/1990 | Null | |
| | | | | | | STRU 17 | 100 | Stack/Vent | SV002 | 10/1/1990 | Null | |
| | | EQUI 24 | EU025 | Leg #4 Bucket Elevator | sends to | EQUI 154 | 100 | Separation Equipment | Null | 9/1/1988 | Null | |
| | | | | | | STRU 17 | 100 | Stack/Vent | SV002 | 9/1/1988 | Null | |
| | | EQUI 42 | EU069 | Leg L#1 Dryer Discharge Bucket Elevator | sends to | EQUI 149 | 100 | Separation Equipment | Null | 9/1/2000 | Null | |
| | | | | | | STRU 10 | 100 | Stack/Vent | SV023 | 9/1/2000 | Null | |
| | | EQUI 57 | EU044 | Leg B1 Dryer Rock Elevator | sends to | EQUI 144 | 50 | Separation Equipment | Null | 11/15/1999 | Null | |
| | | | | | | EQUI 145 | 50 | Separation Equipment | Null | 11/15/1999 | Null | |
| | | | | | | STRU 1 | 50 | Stack/Vent | SV014 | 11/15/1999 | Null | |
| | | | | | | STRU 3 | 50 | Stack/Vent | SV016 | 11/15/1999 | Null | |
| | | EQUI 60 | EU053 | Leg #7 Elevator | sends to | EQUI 154 | 100 | Separation Equipment | Null | 1/1/1998 | Null | |

Relationships

AI ID (Name): 65 (Superior Minerals Co)

Activity: IND20100001

| SI Category | SI Type | Subject Item ID | Delta Designation | Description | Relationship | Related SI ID | % Flow | Related SI Type | Related Delta Designation | Relationship Start Date | Relationship End Date | |
|-------------|------------------------------|-----------------|-------------------|--|--------------|---------------|--------|----------------------|---------------------------|-------------------------|-----------------------|--|
| Equipment | Elevator | EQUI 60 | EU053 | Leg #7 Elevator | sends to | STRU 17 | 100 | Stack/Vent | SV002 | 1/1/1998 | Null | |
| | | EQUI 63 | EU057 | Leg 2 Bradley Ball Mill Elevator | sends to | EQUI 144 | 100 | Separation Equipment | Null | 7/1/2000 | Null | |
| | | | | | | STRU 1 | 100 | Stack/Vent | SV014 | 7/1/2000 | Null | |
| | Filling Operations Equipment | EQUI 126 | Null | Bin 33 Super Sack Filling Station | sends to | EQUI 148 | 100 | Separation Equipment | Null | 8/1/2006 | Null | |
| | | | | | | STRU 9 | 100 | Stack/Vent | SV022 | 8/1/2006 | Null | |
| | | EQUI 127 | Null | Super Sack Filling Station | sends to | EQUI 148 | 100 | Separation Equipment | Null | 8/1/2006 | Null | |
| | | | | | | STRU 9 | 100 | Stack/Vent | SV022 | 8/1/2006 | Null | |
| | Loading-Unloading Equipment | EQUI 64 | EU063 | Bin 22 | sends to | EQUI 147 | 100 | Separation Equipment | Null | 4/1/1999 | Null | |
| | | | | | | STRU 6 | 100 | Stack/Vent | SV019 | 4/1/1999 | Null | |
| | | EQUI 102 | EU140 | Closed Top Loadout system | sends to | EQUI 154 | 100 | Separation Equipment | Null | 9/1/1988 | Null | |
| | | | | | | STRU 17 | 100 | Stack/Vent | SV002 | 9/1/1988 | Null | |
| | Milling Equipment | EQUI 3 | EU002 | Williams Hammermill | sends to | EQUI 153 | 100 | Separation Equipment | Null | 10/1/1990 | Null | |
| | | | | | | STRU 16 | 100 | Stack/Vent | SV001 | 10/1/1990 | Null | |
| | | EQUI 6 | EU005 | Williams Roller Mill & Burner | sends to | EQUI 153 | 100 | Separation Equipment | Null | 9/1/1987 | Null | |
| | | | | | | STRU 16 | 100 | Stack/Vent | SV001 | 9/1/1987 | Null | |
| | | EQUI 33 | EU054 | Raymond Roller Mill & Heater | sends to | EQUI 145 | 100 | Separation Equipment | Null | 11/15/1999 | Null | |
| | | | | | | STRU 3 | 100 | Stack/Vent | SV016 | 11/15/1999 | Null | |
| | Other Emission Unit | EQUI 41 | EU068 | Lehigh Dryer & Heater | sends to | EQUI 149 | 100 | Separation Equipment | Null | 9/1/2000 | Null | |
| | | | | | | STRU 10 | 100 | Stack/Vent | SV023 | 9/1/2000 | Null | |
| | Rolling Equipment | EQUI 29 | EU047 | Bradley Roller Mill Separator & Heater | sends to | EQUI 144 | 100 | Separation Equipment | Null | 11/15/1999 | Null | |
| | | | | | | STRU 1 | 100 | Stack/Vent | SV014 | 11/15/1999 | Null | |
| | Screens | EQUI 9 | EU008 | Screen #1 Coarse Screen | sends to | EQUI 154 | 100 | Separation Equipment | Null | 9/1/1988 | Null | |
| | | | | | | STRU 17 | 100 | Stack/Vent | SV002 | 9/1/1988 | Null | |
| | | EQUI 10 | EU009 | Screen #2 Fines Screen | sends to | EQUI 153 | 100 | Separation Equipment | Null | 1/1/1991 | Null | |
| | | | | | | STRU 16 | 100 | Stack/Vent | SV001 | 1/1/1991 | Null | |
| | | EQUI 95 | EU132 | Screener #3 - M Screener | sends to | EQUI 153 | 50 | Separation Equipment | Null | 1/1/1998 | Null | |
| | | | | | | EQUI 154 | 50 | Separation Equipment | Null | 1/1/1998 | Null | |
| | | | | | | STRU 16 | 50 | Stack/Vent | SV001 | 1/1/1998 | Null | |
| | | | | | | STRU 17 | 50 | Stack/Vent | SV002 | 1/1/1998 | Null | |
| | | EQUI 96 | EU133 | Screener B1 | sends to | EQUI 144 | 100 | Separation Equipment | Null | 11/1/2004 | Null | |
| | | | | | | STRU 1 | 100 | Stack/Vent | SV014 | 11/1/2004 | Null | |
| | Separation Equipment | EQUI 36 | EU060 | Ultrafine Classifier & Heater | sends to | EQUI 146 | 100 | Separation Equipment | Null | 8/1/1999 | Null | |
| | | | | | | STRU 4 | 100 | Stack/Vent | SV017 | 8/1/1999 | Null | |
| | | EQUI 81 | EU094 | Bradley Dryer Cyclone B1 | sends to | EQUI 144 | 100 | Separation Equipment | Null | 10/15/1999 | Null | |
| | | | | | | STRU 1 | 100 | Stack/Vent | SV014 | 10/15/1999 | Null | |
| | | EQUI 87 | EU100 | Cyclone Bradley B2 | sends to | EQUI 144 | 100 | Separation Equipment | Null | 11/15/1999 | Null | |
| | | | | | | STRU 1 | 100 | Stack/Vent | SV014 | 11/15/1999 | Null | |
| | | EQUI 88 | EU101 | Cyclone Bradley B3 | sends to | EQUI 144 | 100 | Separation Equipment | Null | 11/15/1999 | Null | |
| | | | | | | STRU 1 | 100 | Stack/Vent | SV014 | 11/15/1999 | Null | |

Relationships

AI ID (Name): 65 (Superior Minerals Co)

Activity: IND20100001

| SI Category
Equipment | SI Type | Subject Item
ID | Delta
Designation | Description | Relationship | Related SI
ID | % Flow | Related SI Type | Related Delta
Designation | Relationship
Start Date | Relationship
End Date | |
|--------------------------|----------------------|--------------------|----------------------|---------------------------------|--------------|------------------|--------|----------------------|------------------------------|----------------------------|--------------------------|--|
| | Separation Equipment | EQUI 89 | EU102 | Cyclone Raymond R1 | sends to | EQUI 145 | 100 | Separation Equipment | Null | 11/15/1999 | Null | |
| | | | | | | STRU 3 | 100 | Stack/Vent | SV016 | 11/15/1999 | Null | |
| | | EQUI 90 | EU103 | Cyclone Williams #1 | sends to | EQUI 153 | 50 | Separation Equipment | Null | 9/1/1988 | Null | |
| | | | | | | EQUI 155 | 50 | Separation Equipment | Null | 9/1/1988 | Null | |
| | | | | | | STRU 16 | 50 | Stack/Vent | SV001 | 9/1/1988 | Null | |
| | | | | | | STRU 18 | 50 | Stack/Vent | SV003 | 9/1/1988 | Null | |
| | | EQUI 100 | EU137 | Ultrafines Cyclone - Cyclone #2 | sends to | EQUI 146 | 100 | Separation Equipment | Null | 8/1/1999 | Null | |
| | | | | | | STRU 4 | 100 | Stack/Vent | SV017 | 8/1/1999 | Null | |
| | | EQUI 104 | EU139 | Classifier W-1 Williams | sends to | EQUI 153 | 100 | Separation Equipment | Null | 8/1/1988 | Null | |
| | | | | | | STRU 16 | 100 | Stack/Vent | SV001 | 8/1/1988 | Null | |
| | | EQUI 159 | EU098 | Classifier R-1 Raymond Mill | sends to | EQUI 145 | 100 | Separation Equipment | Null | 11/15/1999 | Null | |
| | | | | | | STRU 3 | 100 | Stack/Vent | SV016 | 11/15/1999 | Null | |
| | Silo/Bin | EQUI 5 | EU004 | Bin 9 Storage Silo | sends to | EQUI 153 | 100 | Separation Equipment | Null | 9/1/1988 | Null | |
| | | | | | | STRU 16 | 100 | Stack/Vent | SV001 | 9/1/1988 | Null | |
| | | EQUI 11 | EU010 | Bin 15 CC70 | sends to | EQUI 150 | 33 | Separation Equipment | Null | 9/1/1988 | Null | |
| | | | | | | EQUI 156 | 33 | Separation Equipment | Null | 9/1/1988 | Null | |
| | | | | | | EQUI 158 | 33 | Separation Equipment | Null | 9/1/1988 | Null | |
| | | | | | | STRU 12 | 33 | Stack/Vent | SV025 | 9/1/1988 | Null | |
| | | | | | | STRU 23 | 33 | Stack/Vent | SV008 | 9/1/1988 | Null | |
| | | | | | | STRU 27 | 33 | Stack/Vent | SV012 | 9/1/1988 | Null | |
| | | EQUI 12 | EU011 | Bin 6 CC20 | sends to | EQUI 154 | 100 | Separation Equipment | Null | 9/1/1988 | Null | |
| | | | | | | STRU 17 | 100 | Stack/Vent | SV002 | 9/1/1988 | Null | |
| | | EQUI 13 | EU012 | Bin 7 CC30 | sends to | EQUI 154 | 100 | Separation Equipment | Null | 9/1/1988 | Null | |
| | | | | | | STRU 17 | 100 | Stack/Vent | SV002 | 9/1/1988 | Null | |
| | | EQUI 14 | EU013 | Bin 8 CC40 | sends to | EQUI 154 | 100 | Separation Equipment | Null | 9/1/1988 | Null | |
| | | | | | | STRU 17 | 100 | Stack/Vent | SV002 | 9/1/1988 | Null | |
| | | EQUI 15 | EU014 | Bin 12 CC10 | sends to | EQUI 154 | 100 | Separation Equipment | Null | 9/1/1988 | Null | |
| | | | | | | STRU 17 | 100 | Stack/Vent | SV002 | 9/1/1988 | Null | |
| | | EQUI 18 | EU019 | Bin 16 CC70 | sends to | EQUI 150 | 33 | Separation Equipment | Null | 6/1/1994 | Null | |
| | | | | | | EQUI 156 | 33 | Separation Equipment | Null | 6/1/1994 | Null | |
| | | | | | | EQUI 158 | 33 | Separation Equipment | Null | 6/1/1994 | Null | |
| | | | | | | STRU 12 | 33 | Stack/Vent | SV025 | 6/1/1994 | Null | |
| | | | | | | STRU 23 | 33 | Stack/Vent | SV008 | 6/1/1994 | Null | |
| | | | | | | STRU 27 | 33 | Stack/Vent | SV012 | 6/1/1994 | Null | |
| | | EQUI 25 | EU026 | Bin 1 CC20 | sends to | EQUI 154 | 100 | Separation Equipment | Null | 9/1/1988 | Null | |
| | | | | | | STRU 17 | 100 | Stack/Vent | SV002 | 9/1/1988 | Null | |
| | | EQUI 26 | EU027 | Bin 2 Shell & Bone | sends to | EQUI 154 | 100 | Separation Equipment | Null | 9/1/1988 | Null | |
| | | | | | | STRU 17 | 100 | Stack/Vent | SV002 | 9/1/1988 | Null | |
| | | EQUI 30 | EU048 | Bin 20 | sends to | EQUI 152 | 100 | Separation Equipment | Null | 4/1/1999 | Null | |

Relationships

AI ID (Name): 65 (Superior Minerals Co)

Activity: IND20100001

| SI Category
Equipment | SI Type
Silo/Bin | Subject Item
ID | Delta
Designation | Description | Relationship | Related SI
ID | % Flow | Related SI Type | Related Delta
Designation | Relationship
Start Date | Relationship
End Date | |
|--------------------------|---------------------|--------------------|----------------------|--|--------------|------------------|--------|----------------------|------------------------------|----------------------------|--------------------------|--|
| | | EQUI 30 | EU048 | Bin 20 | sends to | STRU 14 | 100 | Stack/Vent | SV027 | 4/1/1999 | Null | |
| | | EQUI 31 | EU049 | Bin 28 | sends to | EQUI 150 | 33 | Separation Equipment | Null | 10/1/1999 | Null | |
| | | | | | | EQUI 156 | 33 | Separation Equipment | Null | 10/1/1999 | Null | |
| | | | | | | EQUI 158 | 33 | Separation Equipment | Null | 10/1/1999 | Null | |
| | | | | | | STRU 12 | 33 | Stack/Vent | SV025 | 10/1/1999 | Null | |
| | | | | | | STRU 23 | 33 | Stack/Vent | SV008 | 10/1/1999 | Null | |
| | | | | | | STRU 27 | 33 | Stack/Vent | SV012 | 10/1/1999 | Null | |
| | | EQUI 48 | EU079 | Bin 19 CC70 | sends to | EQUI 152 | 100 | Separation Equipment | Null | 4/1/1999 | Null | |
| | | | | | | STRU 14 | 100 | Stack/Vent | SV027 | 4/1/1999 | Null | |
| | | EQUI 50 | EU081 | Bin 21 | sends to | EQUI 152 | 100 | Separation Equipment | Null | 4/1/1999 | Null | |
| | | | | | | STRU 14 | 100 | Stack/Vent | SV027 | 4/1/1999 | Null | |
| | | EQUI 59 | EU052 | Raw Material Bin 26 | sends to | EQUI 144 | 100 | Separation Equipment | Null | 11/1/1999 | Null | |
| | | | | | | STRU 1 | 100 | Stack/Vent | SV014 | 11/1/1999 | Null | |
| | | EQUI 61 | EU055 | Bin 18 CC50 | sends to | EQUI 154 | 100 | Separation Equipment | Null | 8/1/1994 | Null | |
| | | | | | | STRU 17 | 100 | Stack/Vent | SV002 | 8/1/1994 | Null | |
| | | EQUI 71 | EU084 | Bin 24 | sends to | EQUI 152 | 100 | Separation Equipment | Null | 4/1/1999 | Null | |
| | | | | | | STRU 14 | 100 | Stack/Vent | SV027 | 4/1/1999 | Null | |
| | | EQUI 72 | EU085 | Bin 23 | sends to | EQUI 152 | 100 | Separation Equipment | Null | 4/1/1999 | Null | |
| | | | | | | STRU 14 | 100 | Stack/Vent | SV027 | 4/1/1999 | Null | |
| | | EQUI 73 | EU086 | Bin 27 Raymond Mill Feed | sends to | EQUI 145 | 100 | Separation Equipment | Null | 11/15/1999 | Null | |
| | | | | | | STRU 3 | 100 | Stack/Vent | SV016 | 11/15/1999 | Null | |
| | | EQUI 74 | EU087 | Bin 29 Warehouse Bagger Bin | sends to | EQUI 148 | 100 | Separation Equipment | Null | 11/15/1999 | Null | |
| | | | | | | STRU 9 | 100 | Stack/Vent | SV022 | 11/15/1999 | Null | |
| | | EQUI 75 | EU088 | Bin 31 CC70 | sends to | EQUI 150 | 33 | Separation Equipment | Null | 7/1/2000 | Null | |
| | | | | | | EQUI 156 | 33 | Separation Equipment | Null | 7/1/2000 | Null | |
| | | | | | | EQUI 158 | 33 | Separation Equipment | Null | 7/1/2000 | Null | |
| | | | | | | STRU 12 | 33 | Stack/Vent | SV025 | 7/1/2000 | Null | |
| | | | | | | STRU 23 | 33 | Stack/Vent | SV008 | 7/1/2000 | Null | |
| | | | | | | STRU 27 | 33 | Stack/Vent | SV012 | 7/1/2000 | Null | |
| | | EQUI 76 | EU089 | Bin 32 CC70 | sends to | EQUI 150 | 33 | Separation Equipment | Null | 7/1/2000 | Null | |
| | | | | | | EQUI 156 | 33 | Separation Equipment | Null | 7/1/2000 | Null | |
| | | | | | | EQUI 158 | 33 | Separation Equipment | Null | 7/1/2000 | Null | |
| | | | | | | STRU 12 | 33 | Stack/Vent | SV025 | 7/1/2000 | Null | |
| | | | | | | STRU 23 | 33 | Stack/Vent | SV008 | 7/1/2000 | Null | |
| | | | | | | STRU 27 | 33 | Stack/Vent | SV012 | 7/1/2000 | Null | |
| | | EQUI 77 | EU090 | Bin 25 Warehouse Ultrafines | sends to | EQUI 151 | 100 | Separation Equipment | Null | 8/1/1999 | Null | |
| | | | | | | STRU 13 | 100 | Stack/Vent | SV026 | 8/1/1999 | Null | |
| | | EQUI 91 | EU104 | Dust system Transported to Bin 20, DS-12 | sends to | EQUI 158 | 100 | Separation Equipment | Null | 4/1/1999 | Null | |
| | | | | | | STRU 27 | 100 | Stack/Vent | SV012 | 4/1/1999 | Null | |

Relationships

AI ID (Name): 65 (Superior Minerals Co)
Activity: IND20100001

| SI Category
Equipment | SI Type
Silo/Bin | Subject Item
ID | Delta
Designation | Description | Relationship | Related SI
ID | % Flow | Related SI Type | Related Delta
Designation | Relationship
Start Date | Relationship
End Date | |
|--------------------------|---------------------|--------------------|----------------------|------------------------------------|--------------|------------------|--------|----------------------|------------------------------|----------------------------|--------------------------|--|
| | | EQUI 98 | EU135 | Transporter Bin 16/28 to Bin 19/20 | sends to | EQUI 152 | 100 | Separation Equipment | Null | 11/15/1999 | Null | |
| | | | | | | STRU 14 | 100 | Stack/Vent | SV027 | 11/15/1999 | Null | |
| | | EQUI 99 | EU136 | Transporter Bin 31/32 to Bin 19/10 | sends to | EQUI 152 | 50 | Separation Equipment | Null | 7/1/2000 | Null | |
| | | | | | | EQUI 157 | 50 | Separation Equipment | Null | 7/1/2000 | Null | |
| | | | | | | STRU 14 | 50 | Stack/Vent | SV027 | 7/1/2000 | Null | |
| | | | | | | STRU 26 | 50 | Stack/Vent | SV011 | 7/1/2000 | Null | |
| | | EQUI 105 | EU028 | Bin 3 CC45 | sends to | EQUI 154 | 100 | Separation Equipment | Null | 9/1/1988 | Null | |
| | | | | | | STRU 17 | 100 | Stack/Vent | SV002 | 9/1/1988 | Null | |
| | | EQUI 106 | EU029 | Bin 4 CC70 | sends to | EQUI 152 | 100 | Separation Equipment | Null | 9/1/1988 | Null | |
| | | | | | | STRU 14 | 100 | Stack/Vent | SV027 | 9/1/1988 | Null | |
| | | EQUI 107 | EU030 | Bin 13 Free Flow | sends to | EQUI 154 | 100 | Separation Equipment | Null | 6/1/1994 | Null | |
| | | | | | | STRU 17 | 100 | Stack/Vent | SV002 | 6/1/1994 | Null | |
| | | EQUI 108 | EU031 | Bin 10 CC70 | sends to | EQUI 157 | 100 | Separation Equipment | Null | 6/1/1994 | Null | |
| | | | | | | STRU 26 | 100 | Stack/Vent | SV011 | 6/1/1994 | Null | |
| | | EQUI 109 | EU032 | Bin 11 | sends to | EQUI 157 | 100 | Separation Equipment | Null | 6/1/1994 | Null | |
| | | | | | | STRU 26 | 100 | Stack/Vent | SV011 | 6/1/1994 | Null | |
| | | EQUI 110 | EU033 | Bin 14 Free Flow | sends to | EQUI 154 | 100 | Separation Equipment | Null | 6/1/1994 | Null | |
| | | | | | | STRU 17 | 100 | Stack/Vent | SV002 | 6/1/1994 | Null | |
| | | EQUI 160 | Null | Bin 34 | sends to | EQUI 152 | 100 | Separation Equipment | Null | 1/1/2015 | Null | |
| | | | | | | STRU 14 | 100 | Stack/Vent | SV027 | 1/1/2015 | Null | |

FUGI

AI ID (Name): 65 (Superior Minerals Co)

Activity: IND20100001

| Subject Item Type | Subject Item ID | Delta Designation | Description | Install Year | Pollutants Emitted | |
|------------------------------------|-----------------|-------------------|---|--------------|--------------------|--|
| Material Handling/Transfer/Storage | FUGI 43 | Null | Front End Loader - Roller Mill/Ball Mill | 1987 | Particulate Matter | |
| | | | | | PM < 2.5 micron | |
| | | | | | PM < 10 micron | |
| | FUGI 44 | Null | Feed Hopper - Roller Mill (Raymond, Williams and Bradley) | 1987 | Particulate Matter | |
| | | | | | PM < 2.5 micron | |
| | | | | | PM < 10 micron | |
| | FUGI 45 | Null | Uncaptured emissions from Truck (Hopper) Loader | 1987 | Particulate Matter | |
| | | | | | PM < 2.5 micron | |
| | | | | | PM < 10 micron | |
| | FUGI 47 | Null | 12' Hopper - River Dock Unloading | 1987 | Particulate Matter | |
| | | | | | PM < 2.5 micron | |
| | | | | | PM < 10 micron | |
| | FUGI 48 | Null | Asphalt Pad Truck Loadout | 1987 | Particulate Matter | |

FUGI

AI ID (Name): 65 (Superior Minerals Co)
Activity: IND20100001

| Subject Item Type | Subject Item ID | Delta Designation | Description | Install Year | Pollutants Emitted | |
|--------------------------------------|-----------------|-------------------|---------------------------|--------------|--------------------|--|
| Material Handling/ Transfer/ Storage | FUGI 48 | Null | Asphalt Pad Truck Loadout | 1987 | PM < 2.5 micron | |
| | | | | | PM < 10 micron | |
| | FUGI 49 | Null | Front End Loader - Small | 1987 | Particulate Matter | |
| | | | | | PM < 2.5 micron | |
| | | | | | PM < 10 micron | |
| | FUGI 50 | Null | Screened Material Loader | 1987 | Particulate Matter | |
| | | | | | PM < 2.5 micron | |
| | | | | | PM < 10 micron | |
| | FUGI 51 | Null | Feed Hopper - Lehigh Mill | 1987 | Particulate Matter | |
| | | | | | PM < 2.5 micron | |
| | | | | | PM < 10 micron | |
| | FUGI 52 | Null | Pile Unloading | 1987 | Particulate Matter | |
| | | | | | PM < 2.5 micron | |

FUGI

AI ID (Name): 65 (Superior Minerals Co)
Activity: IND20100001

| Subject Item Type | Subject Item ID | Delta Designation | Description | Install Year | Pollutants Emitted | |
|--------------------------------------|-----------------|-------------------|---------------------------------------|--------------|--------------------|--|
| Material Handling/ Transfer/ Storage | FUGI 52 | Null | Pile Unloading | 1987 | PM < 10 micron | |
| | | | | | | |
| | | | | | | |
| Paved Road | FUGI 87 | Null | Paved Road Pet Coke to Unloading Area | 1987 | Particulate Matter | |
| | | | | | PM < 2.5 micron | |
| | | | | | PM < 10 micron | |
| | FUGI 88 | Null | Paved Road Pet Coke Loader | 1987 | Particulate Matter | |
| | | | | | PM < 2.5 micron | |
| | | | | | PM < 10 micron | |
| Piles | FUGI 46 | Null | Piles - Wind Erosion | 1987 | Particulate Matter | |
| | | | | | PM < 2.5 micron | |
| | | | | | PM < 10 micron | |
| | FUGI 89 | Null | Pet Coke Storage Pile | 2015 | Particulate Matter | |
| | | | | | PM < 2.5 micron | |
| | | | | | PM < 10 micron | |

Building

AI ID (Name): 65 (Superior Minerals Co)
Activity: IND20100001

| Subject Item ID | Delta Designation | Description | Height | Units (height) | Length | Units (length) | Width | Units (width) | |
|-----------------|-------------------|------------------|--------|----------------|--------|----------------|-------|---------------|--|
| STRU 29 | Null | Lehigh | 64.96 | feet | 102 | feet | 61 | feet | |
| STRU 30 | Null | North Bin | 61.02 | feet | 23 | feet | 120 | feet | |
| STRU 31 | Null | West Bin | 64.96 | feet | 24 | feet | 66 | feet | |
| STRU 32 | Null | Warehouse | 20.01 | feet | 65 | feet | 105 | feet | |
| STRU 33 | Null | Marcy Building | 24.93 | feet | 55 | feet | 25 | feet | |
| STRU 34 | Null | Shop/Office | 26.9 | feet | 118 | feet | 216 | feet | |
| STRU 35 | Null | Bradley Building | 56.1 | feet | 65 | feet | 105 | feet | |
| STRU 36 | Null | Bins/Storage | 62.99 | feet | 118 | feet | 118 | feet | |
| STRU 37 | Null | Williams | 83.99 | feet | 83 | feet | 55 | feet | |

Stack/Vents

AI ID (Name): 65 (Superior Minerals Co)

Activity: IND20100001

| Subject Item ID | Delta Designation | Description | Stack Height (feet) | Stack Diameter (feet) | Stack Length (feet) | Stack Width (feet) | Stack Flow Rate (cubic ft/min) | Discharge Temperature (°F) | Flow Rate/Temp Information Source | Discharge Direction | |
|-----------------|-------------------|----------------------------------|---------------------|-----------------------|---------------------|--------------------|--------------------------------|----------------------------|-----------------------------------|-----------------------------------|--|
| STRU 1 | SV014 | Dryer Dust System Vent, DS-14 | 49 | 2.67 | Null | Null | 20,000 | 180 | Manufacturer | Upwards with no cap on stack/vent | |
| STRU 3 | SV016 | Raymond Mill Dust System, DS-16 | 67 | 2.33 | Null | Null | 16,000 | 150 | Manufacturer | Upwards with no cap on stack/vent | |
| STRU 4 | SV017 | DL60 Powder Loading, DS-17 | 66 | 2.5 | Null | Null | 2,300 | 180 | Manufacturer | Upwards with no cap on stack/vent | |
| STRU 6 | SV019 | Ultrafine Bin Vent System, DS-19 | 71 | 0.5 | Null | Null | 500 | 100 | Manufacturer | Upwards with no cap on stack/vent | |
| STRU 9 | SV022 | Dust System #22, DS-22 | 16 | 1.5 | Null | Null | 7,069 | 100 | Manufacturer | Upwards with no cap on stack/vent | |
| STRU 10 | SV023 | Lehigh Slag Dryer System, DS-23 | 15 | 2.5 | Null | Null | 19,635 | 180 | Manufacturer | Upwards with no cap on stack/vent | |
| STRU 12 | SV025 | Dust System #25, DS-25 | 75 | 0.5 | Null | Null | 785 | 100 | Manufacturer | Horizontally | |
| STRU 13 | SV026 | Bin 25 Dust System, DS-26 | 44 | 0.5 | Null | Null | 700 | 100 | Manufacturer | Upwards with no cap on stack/vent | |
| STRU 14 | SV027 | Bin 20 Dust System, DS-27 | 102 | 2 | Null | Null | 12,000 | 100 | Manufacturer | Upwards with no cap on stack/vent | |
| STRU 16 | SV001 | Williams Mills Dust System, DS-1 | 81 | 1.5 | Null | Null | 12,000 | 150 | Manufacturer | Upwards with no cap on stack/vent | |
| STRU 17 | SV002 | Dust System #2, DS-2 | 89 | Null | 2 | 2 | 10,000 | 100 | Manufacturer | Upwards with no cap on stack/vent | |
| STRU 18 | SV003 | Dust System #3, DS-3 | 30.83 | 2 | Null | Null | 12,566 | 70 | Manufacturer | Upwards with no cap on stack/vent | |
| STRU 23 | SV008 | Dust System #8, DS-8 | 75 | 0.5 | Null | Null | 785 | 100 | Manufacturer | Upwards with no cap on stack/vent | |
| STRU 26 | SV011 | Dust System #11, DS-11 | 77 | Null | 0.56 | 0.56 | 700 | 100 | Manufacturer | Upwards with no cap on stack/vent | |
| STRU 27 | SV012 | Bradley Dolomite Circuit, DS-12 | 63 | 1.33 | Null | Null | 8,727 | 100 | Manufacturer | Horizontally | |

Other Controls

AI ID (Name): 65 (Superior Minerals Co)

Activity: IND20100001

[illegible]

| SI Id | Sequence | Requirement |
|--------|----------|---|
| TFAC 1 | 1 | Moisture Content $\geq$ 1.5 percent in feed material. [Minn. R. 7007.0800, subp. 2(A)] |
| TFAC 1 | 2 | <p>Demonstrate feed material moisture content by either 1 or 2 below:</p> <p>1. Test moisture content of each different feed material source (sampled at an area representative of the feed source and physically capable of being sampled), as follows:</p> <ul style="list-style-type: none"> a. Use American Society for Testing and Materials (ASTM) method numbers D 2216-92 or D 4643-93 (or equivalent). b. Keep records of each moisture content test summarizing the method used, results, date, time, and initials of person performing test. c. Test weekly, when operating, unless three consecutive tests at the stationary source location show moisture contents of greater than or equal to 1.5 percent after which testing is no longer required until the source of the feed material changes. d. When testing indicates that feed material moisture content is less than 1.5 percent, or in situations where it is infeasible to sample and test, or where the Permittee elects not to sample and test, the Permittee must operate a moisture addition device at or immediately prior to the initial crusher(s) or initial screen(s) where unprocessed feed material is being fed to achieve a moisture content greater than or equal to 1.5 percent. Moisture addition during operation shall continue until subsequent moisture content testing demonstrates that feed material moisture content is greater than or equal to 1.5 percent. Daily, when operating, either: <ul style="list-style-type: none"> (i) keep records of the date, water flow rate, material throughput rate, and initials of the person making the record and the time the record was made, or (ii) conduct moisture content testing daily on the feed material after water application following a and b above, and if results show moisture content is less than 1.5 percent, increase water addition to ensure moisture is 1.5 percent or greater and retest to verify. <p>OR</p> <p>2. Keep records indicating that feed material is being removed from below the water table - or from below the surface of a waterway (e.g., creek, river, lake) - or that the feed material is recycled asphalt pavement. Records shall include a description of the source (if recycled asphalt pavement, so indicate), the corresponding dates, and the initials of the person making the record. [Minn. R. 7007.0800, subp. 2(A)]</p> |
| TFAC 1 | 3 | <p>Non-Process Dust Control</p> <p>All reasonable measures shall be taken to prevent avoidable amounts of particulate matter from becoming airborne. In a practical manner this refers to preventing avoidable visible dust emissions beyond the lot line surrounding the stationary source. Control of non-process dust emissions can be achieved through such measures as applying water or commercially available dust suppressants to stockpiles, unpaved roads and handling areas.</p> <p>In addition, the following requirements apply to the Permittee:</p> <ul style="list-style-type: none"> 1. Record date and time of action and initials of person making the record. 2. Record amount of water or dust suppressant applied. 3. If a commercially available dust suppressant is used, it shall be applied in accordance with the manufacturer's guidelines. The Permittee must keep a copy of these manufacturer's guidelines. 4. Equipment to apply water or dust suppressant shall always be available at the site or on call for use at the site within a given operating day. [Minn. R. 7007.0800, subp. 2(A)] |
| TFAC 1 | 4 | <p>Labeling Requirements: Permanently affix the manufacturer's serial number (or otherwise unique identifying number) to each piece of crushing, screening, transfer operation, and stationary internal combustion engine equipment for tracking purposes within 60 days of permit issuance. The number shall be permanently affixed and maintained so that it is readable and visible at all times from a safe distance at each stationary source. This number shall correspond to the number contained in records regarding the piece of equipment. [Minn. R. 7007.0800, subp. 2(A)]</p> |

| SI Id | Sequence | Requirement |
|--------|----------|--|
| TFAC 1 | 1240 | <p>Permit Appendices: This permit contains appendices as listed in the permit Table of Contents. The Permittee shall comply with all requirements contained in the following appendices:</p> <p>Appendix A. Insignificant activities and general applicable requirements;
 Appendix C. Fugitive dust control plan;
 Appendix D. General public preclusion plan;
 Appendix E. 40 CFR pt. 60, subp. OOO - Standards of Performance for Nonmetallic Mineral Processing Plants; and
 Appendix F. 40 CFR pt. 60, subp. A - General Provisions.</p> <p>Modeling parameters in Appendix B are included for reference only as described elsewhere in this permit. [Minn. R. 7007.0800, subp. 2(A) & (B)]</p> |
| TFAC 1 | 1245 | <p>The Permittee must comply with Minn. Stat. 116.385. The Permittee may not use trichloroethylene at its permitted facility including in any manufacturing, processing, or cleaning processes, except as described in Minn. Stat. 116.385, subd. 2(b) and 4. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and citizens under the Clean Air Act. [Minn. R. 7007.0100, subp. 7(X), Minn. Stat. 116.385]</p> |
| TFAC 1 | 1260 | <p>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.</p> <p>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)]</p> |
| TFAC 1 | 1280 | <p>Comply with Fugitive Emission Control Plan: The Permittee shall follow the actions and recordkeeping specified in the fugitive dust control plan in Appendix C of this permit. If the Commissioner determines the Permittee is out of compliance with Minn. R. 7011.0150 or the fugitive control plan, then the Permittee may be required to amend the control plan and/or to install and operate particulate matter ambient monitors as requested by the Commissioner. [Minn. R. 7007.0800, subp. 2(A), Minn. R. 7009.0020, Minn. R. 7011.0150, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| TFAC 1 | 1300 | <p>The Permittee shall comply with National Primary and Secondary Ambient Air Quality Standards, 40 CFR pt. 50, and the Minnesota Ambient Air Quality Standards, Minn. R. 7009.0010 to 7009.0090. Compliance shall be demonstrated upon written request by the MPCA. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| TFAC 1 | 1380 | <p>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]</p> |
| TFAC 1 | 1390 | <p>The Permittee must at all times properly operate and maintain the facilities and systems of treatment and control and the appurtenances related to them that are installed or used by the Permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. [Minn. R. 7007.0800, subp. 16(J)]</p> |
| TFAC 1 | 1400 | <p>Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. At a minimum, the O & M plan shall identify all air pollution control equipment and control practices and shall include a preventative maintenance program for the equipment and practices, a description of (the minimum but not necessarily the only) corrective 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)]</p> |

| SI Id | Sequence | Requirement |
|--------|----------|--|
| TFAC 1 | 1410 | Operation Changes: In any shutdown, breakdown, or deviation the Permittee must immediately or as soon as possible considering plant and personnel safety take all practical steps to modify operations to reduce the emission of any regulated air pollutant. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment are permitted to operate. [Minn. R. 7019.1000, subp. 4] |
| TFAC 1 | 1420 | 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] |
| TFAC 1 | 1430 | 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] |
| TFAC 1 | 1440 | 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)] |
| TFAC 1 | 1450 | The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16. [Minn. R. 7007.0800, subp. 16] |
| TFAC 1 | 1460 | Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in this permit. [Minn. R. ch. 7017] |
| TFAC 1 | 1470 | 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] |
| TFAC 1 | 1480 | 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] |
| TFAC 1 | 1490 | 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)] |
| TFAC 1 | 1500 | Operation of Monitoring Equipment: Unless noted elsewhere in this permit, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system. [Minn. R. 7007.0800, subp. 4(D)] |
| TFAC 1 | 1510 | 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)] |
| TFAC 1 | 1520 | 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)] |

| SI Id | Sequence | Requirement |
|--------|----------|--|
| TFAC 1 | 1530 | 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 that 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] |
| TFAC 1 | 1610 | <p>Shutdown Notifications: Notify the commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the Permittee does not have advance knowledge of the shutdown, the Permittee must notify the commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in items A, B, and C of Minn. R. 7019.1000, subp. 3.</p> <p>At the time of notification, the owner or operator must inform the commissioner of the cause of the shutdown and the estimated duration. The owner or operator must notify the commissioner when the shutdown is over. [Minn. R. 7019.1000, subp. 3]</p> |
| TFAC 1 | 1620 | <p>Breakdown Notifications: Notify the commissioner within 24 hours of a breakdown of more than one hour of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in items A, B, and C of Minn. R. 7019.1000, subp. 2.</p> <p>At the time of notification or as soon as possible thereafter, the Permittee must inform the commissioner of the cause of the breakdown and the estimated duration. The Permittee must notify the commissioner when the breakdown is over. [Minn. R. 7019.1000, subp. 2]</p> |
| TFAC 1 | 1630 | Notification of Deviations Endangering Human Health or the Environment: Immediately after discovery of the deviation or immediately after when the deviation reasonably should have been discovered, notify the commissioner either orally or by e-mail, or telephone the state duty officer at 800-422-0798 or 651-649-5451, of any deviation from permit conditions that could endanger human health or the environment. [Minn. R. 7019.1000, subp. 1] |
| TFAC 1 | 1640 | <p>Notification of Deviations Endangering Human Health or the Environment Report: Within two working days of discovery, notify the commissioner in writing of any deviation from permit conditions that could endanger human health or the environment. Include the following information in this written description:</p> <ol style="list-style-type: none"> 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation. [Minn. R. 7019.1000, subp. 1] |
| TFAC 1 | 1650 | 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)] |
| TFAC 1 | 1670 | <p>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.</p> <p>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]</p> |

| SI Id | Sequence | Requirement |
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| TFAC 1 | 1680 | 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)] |
| TFAC 1 | 1700 | 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)] |
| TFAC 1 | 1703 | 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)] |
| TFAC 1 | 1730 | 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] |
| TFAC 1 | 1740 | Emission Fees: due 30 days after receipt of an MPCA bill. [Minn. R. 7002.0005-7002.0085] |
| TFAC 1 | 2080 | Modeled Parameters for PM10: The parameters used in PM10 modeling for permit number 13900044-101 are listed in Appendix B of this permit. The parameters describe the operation of the facility at maximum permitted capacity. The purpose of listing the parameters in the appendix is to provide a benchmark for future changes. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| TFAC 1 | 2090 | Equivalent or Better Dispersion (EBD) Modeling Triggers (Modeling Required) for PM10: Any changes that affect any modeled PM10 parameter or emission rate listed in Appendix B, or an addition to the information documented in Appendix B, trigger the EBD Remodeling Submittal requirement. 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. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| TFAC 1 | 2100 | EBD Modeling Submittal for PM10: For changes meeting the criteria in the EBD Modeling Triggers (Modeling Required) requirement, the Permittee may submit an EBD analysis using form AQDM-08. To use an EBD analysis to demonstrate compliance, the baseline modeling (the most recent approved refined modeling demonstration) must be valid as defined in the current version of the MPCA modeling practices manual. The results of the analysis must demonstrate that the proposed change is equivalent or better than the baseline model. When an EBD is submitted for a change, the Permittee must wait for written approval before making the change. When approval is received, construction may begin according to the applicable Minnesota Rules. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| TFAC 1 | 2110 | Computer Dispersion Modeling Triggers for PM10: The Permittee must conduct a refined remodeling analysis if: (1) The EBD Modeling Submittal requirement was triggered but the Permittee chose not to or was not eligible to submit an EBD analysis; (2) The Permittee submitted an EBD analysis but the results of the EBD modeling analysis do not demonstrate equivalent or better dispersion characteristics or the submittal was not approved; or (3) the location of the ambient air boundary is being modified, unless the new boundary completely encompasses the original boundary documented in Appendix D. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| TFAC 1 | 2120 | Computer Dispersion Modeling Protocol for PM10: If the requirement to conduct Computer Dispersion Remodeling is triggered, the Permittee must submit a computer dispersion modeling protocol for the total facility including the proposed change. This protocol will describe the proposed modeling methodology and input data, in accordance with the current version of the MPCA modeling practices manual. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| TFAC 1 | 2130 | Computer Dispersion Modeling Results for PM10: Once approval of the Computer Dispersion Modeling Protocol is received, the Permittee must submit a Computer Dispersion Modeling Report in accordance with the current version of the MPCA modeling practices manual and the approved Computer Dispersion Modeling Protocol. The Report must be included with the permit application when an application is required for the proposed change. When a modeling report is required for a change, the Permittee must wait for written approval before making the change. When approval is received, construction may begin according to the applicable Minnesota Rules. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |

| SI Id | Sequence | Requirement |
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| TFAC 1 | 2140 | <p>General Public Preclusion Plan – Boundary Map</p> <p>The Permittee must use fencing, control access points, and place restriction signage, as specified in Appendix D to maintain control over the effective fence line.</p> <p>Appendix D to this permit is a map that depicts the boundary at which the access of the general public can be controlled and compliance with the National Ambient Air Quality Standards (NAAQS) can be demonstrated. This boundary has been defined as the "effective fence line". Appendix D identifies the forms of control the Permittee will use to restrict access to the general public along portions of the effective fence line. The general public does not include employees or other categories of people who have been directly authorized by the property owner to enter or remain on the property for a limited period of time and for a specific purpose. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subp. 4(D), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| TFAC 1 | 2145 | <p>General Public Preclusion Plan</p> <p>This Plan must, at a minimum, contain the following information:</p> <ol style="list-style-type: none"> 1. A map of the facility that clearly displays the ambient air boundary. The map must indicate how access is precluded for each section of the boundary and must identify all access points (including roadways, power lines, rail spurs, etc.); 2. Locations where fencing will be implemented; 3. Restriction signage spacing (restriction signage may include notices such as "No Trespassing," "Private Property," "Do Not Enter," or "Restricted Area"); and 4. A response plan for when breaches occur. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subp. 4(D), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| TFAC 1 | 2150 | <p>Recordkeeping for Breaches of the Ambient Air Boundary</p> <p>Within three calendar days of each observed breach, the Permittee must document each instance that the ambient air boundary was breached by a member of the general public, including documenting the type, location, and duration of each breach. The Permittee must identify and, within a reasonable amount of time, implement measures to prevent future breaches, if necessary. A breach to the ambient boundary occurs when a member of the general public accesses property identified by the Permittee as non-ambient air.</p> <p>The observation of a breach may be direct or indirect. A direct observation includes witnessing a member of the general public on property identified as non-ambient air. Indirect observations rely on evidence of a breach, such as a cut fence, worn paths, motorized vehicle tracks, or other signs of disturbance by a member of the general public on property identified as non-ambient air.</p> <p>The Permittee must report each breach, including all steps taken or changes made to the General Public Preclusion Plan to prevent additional breaches, in the semiannual Deviations Report required by this permit. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subp. 4(D), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| TFAC 1 | 2155 | <p>General Public Preclusion Plan - Fencing:</p> <p>The Permittee must install and maintain fencing along ambient air boundary effective fence line as depicted in Appendix D. The Permittee must inspect the fence line once per quarter. The Permittee must maintain records of inspection and required maintenance of fence line. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subp. 4(D), Minn. R. 7007.0800, subp. 5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| TFAC 1 | 2160 | <p>General Public Preclusion Plan - Control of Access:</p> <p>The Permittee must control access at any road, trail equal to or wider than 50 inches, and all abandoned railroad grades. The Permittee must secure these access points with a locked and/or monitored gate or other physical barrier precluding access by the general public. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subp. 4(D), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |

| SI Id | Sequence | Requirement |
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| EQUI 1 | 1 | The Permittee must limit Process Throughput ≤ 110.0 tons per hour 24-hour block average to be calculated daily as described later in this permit. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| EQUI 1 | 2 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 1 | 3 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 1 | 6440 | <p>Process Throughput: Daily Recordkeeping. On each day of operation, the Permittee must calculate, record, and maintain the following:</p> <ol style="list-style-type: none"> 1) The total quantity of material throughput; and 2) The 24-hr block average material throughput. <p>These must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| EQUI 1 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 1 | 19650 | The Permittee must vent emissions from EQUI 1 to equipment meeting the requirements of EQUI 144 whenever EQUI 1 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |

| SI Id | Sequence | Requirement |
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| EQUI 1 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 2 | 1 | <p>The Permittee must limit Process Throughput $\leq$ 50.0 tons per hour 24-hour block average to be calculated daily as described later in this permit. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| EQUI 2 | 6440 | <p>Process Throughput: Daily Recordkeeping. On each day of operation, the Permittee must calculate, record, and maintain the following:</p> <p>1) The total quantity of material throughput; and
 2) The 24-hr block average material throughput.</p> <p>These must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| EQUI 2 | 7210 | <p>The Permittee must limit Opacity $\leq$ 10 percent opacity. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350]</p> |

| SI Id | Sequence | Requirement |
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| EQUI 2 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(b);
 40 CFR 60.673;
 40 CFR 60.675(a)-(c);
 40 CFR 60.675(f);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a)(1)-(a)(3);
 40 CFR 60.676(b)(1);
 40 CFR 60.676(e)-(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j);
 40 CFR 60.676(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 3.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 2 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 3 | 1 | <p>The Permittee must limit Process Throughput $\leq$ 50.0 tons per hour 24-hour block average to be calculated daily as described later in this permit. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |

| SI Id | Sequence | Requirement |
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| EQUI 3 | 2 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 3 | 3 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 3 | 6440 | <p>Process Throughput: Daily Recordkeeping. On each day of operation, the Permittee must calculate, record, and maintain the following:</p> <p>1) The total quantity of material throughput; and</p> <p>2) The 24-hr block average material throughput.</p> <p>These must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| EQUI 3 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 3 | 19650 | The Permittee must vent emissions from EQUI 3 to equipment meeting the requirements of EQUI 153 whenever EQUI 3 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |

| SI Id | Sequence | Requirement |
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| EQUI 3 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 4 | 1 | The Permittee must limit Process Throughput $\leq$ 50.0 tons per hour 24-hour block average to be calculated daily as described later in this permit. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| EQUI 4 | 2 | The Permittee must limit Particulate Matter $\leq$ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 4 | 3 | The Permittee must limit Opacity $\leq$ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 4 | 6440 | <p>Process Throughput: Daily Recordkeeping. On each day of operation, the Permittee must calculate, record, and maintain the following:</p> <p>1) The total quantity of material throughput; and
 2) The 24-hr block average material throughput.</p> <p>These must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |

| SI Id | Sequence | Requirement |
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| EQUI 4 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 4 | 19650 | <p>The Permittee must vent emissions from EQUI 4 to equipment meeting the requirements of EQUI 153 whenever EQUI 4 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 4 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |

| SI Id | Sequence | Requirement |
|--------|----------|---|
| EQUI 5 | 1 | The Permittee must limit Process Throughput ≤ 50.0 tons per hour 24-hour block average to be calculated daily as described later in this permit. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| EQUI 5 | 2 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 5 | 3 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 5 | 6440 | <p>Process Throughput: Daily Recordkeeping. On each day of operation, the Permittee must calculate, record, and maintain the following:</p> <ol style="list-style-type: none"> 1) The total quantity of material throughput; and 2) The 24-hr block average material throughput. <p>These must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| EQUI 5 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 5 | 19650 | The Permittee must vent emissions from EQUI 5 to equipment meeting the requirements of EQUI 153 whenever EQUI 5 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |

| SI Id | Sequence | Requirement |
|--------|----------|--|
| EQUI 5 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 6 | 1 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 6 | 2 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 6 | 3450 | Opacity ≤ 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. [Minn. R. 7011.0610, subp. 1(A)(2)] |
| EQUI 6 | 3455 | Sulfur Dioxide ≤ 2.0 pounds per million Btu heat input when burning liquid fossil fuels. The potential to emit from the unit is 0.000588 lb/MMBtu due to equipment design and allowable fuels. [Minn. R. 7011.0610, subp. 2] |
| EQUI 6 | 3460 | 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. 7011.0610, subp. 1(A)(1)] |
| EQUI 6 | 3512 | Fuel type: Natural gas only, by design. [Minn. R. 7005.0100, subp. 35a] |
| EQUI 6 | 3517 | The Permittee shall keep records of fuel purchases showing fuel types. [Minn. R. 7007.0800, subp. 5] |

| SI Id | Sequence | Requirement |
|--------|----------|---|
| EQUI 6 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 6 | 19650 | <p>The Permittee must vent emissions from EQUI 6 to equipment meeting the requirements of EQUI 153 whenever EQUI 6 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 6 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |

| SI Id | Sequence | Requirement |
|--------|----------|---|
| EQUI 7 | 1 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 7 | 2 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 7 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 7 | 19650 | The Permittee must vent emissions from EQUI 7 to equipment meeting the requirements of EQUIs 153, 154 and 155 whenever EQUI 7 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |

| SI Id | Sequence | Requirement |
|--------|----------|---|
| EQUI 7 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 8 | 1 | <p>The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]</p> |
| EQUI 8 | 2 | <p>The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]</p> |
| EQUI 8 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |

| SI Id | Sequence | Requirement |
|--------|----------|--|
| EQUI 8 | 19650 | The Permittee must vent emissions from EQUI 8 to equipment meeting the requirements of EQUI 154 whenever EQUI 8 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 8 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 9 | 1 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 9 | 2 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |

| SI Id | Sequence | Requirement |
|--------|----------|---|
| EQUI 9 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 9 | 19650 | <p>The Permittee must vent emissions from EQUI 9 to equipment meeting the requirements of EQUI 154 whenever EQUI 9 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 9 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 10 | 1 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 10 | 2 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 10 | 7230 | |
| EQUI 10 | 19650 | The Permittee must vent emissions from EQUI 10 to equipment meeting the requirements of EQUI 153 whenever EQUI 10 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 10 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 11 | 1 | <p>The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]</p> |
| EQUI 11 | 2 | <p>The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]</p> |
| EQUI 11 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|--|
| EQUI 11 | 19650 | The Permittee must vent emissions from EQUI 11 to equipment meeting the requirements of EQUIs 150, 156 and 158 whenever EQUI 11 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 11 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 12 | 1 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 12 | 2 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 12 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 12 | 19650 | <p>The Permittee must vent emissions from EQUI 12 to equipment meeting the requirements of EQUI 154 whenever EQUI 12 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 12 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 13 | 1 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 13 | 2 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 13 | 7230 | |
| EQUI 13 | 19650 | The Permittee must vent emissions from EQUI 13 to equipment meeting the requirements of EQUI 154 whenever EQUI 13 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 13 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 14 | 1 | <p>The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]</p> |
| EQUI 14 | 2 | <p>The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]</p> |
| EQUI 14 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|--|
| EQUI 14 | 19650 | The Permittee must vent emissions from EQUI 14 to equipment meeting the requirements of EQUI 154 whenever EQUI 14 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 14 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 15 | 1 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 15 | 2 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 15 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 15 | 19650 | <p>The Permittee must vent emissions from EQUI 15 to equipment meeting the requirements of EQUI 154 whenever EQUI 15 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 15 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 18 | 1 | The Permittee must limit Process Throughput ≤ 50.0 tons per hour 24-hour block average to be calculated daily as described later in this permit. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| EQUI 18 | 2 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 18 | 3 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 18 | 6440 | <p>Process Throughput: Daily Recordkeeping. On each day of operation, the Permittee must calculate, record, and maintain the following:</p> <ol style="list-style-type: none"> 1) The total quantity of material throughput; and 2) The 24-hr block average material throughput. <p>These must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| EQUI 18 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 18 | 19650 | The Permittee must vent emissions from EQUI 18 to equipment meeting the requirements of EQUIs 150, 156 and 158 whenever EQUI 18 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |

| SI Id | Sequence | Requirement |
|---------|----------|--|
| EQUI 18 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 24 | 1 | <p>The Permittee must limit Process Throughput ≤ 75.0 tons per hour 24-hour block average to be calculated daily as described later in this permit. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| EQUI 24 | 2 | <p>The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]</p> |
| EQUI 24 | 6430 | <p>The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]</p> |
| EQUI 24 | 6440 | <p>Process Throughput: Daily Recordkeeping. On each day of operation, the Permittee must calculate, record, and maintain the following:</p> <p>1) The total quantity of material throughput; and
 2) The 24-hr block average material throughput.</p> <p>These must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 24 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 24 | 19650 | <p>The Permittee must vent emissions from EQUI 24 to equipment meeting the requirements of EQUI 154 whenever EQUI 24 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 24 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 25 | 1 | The Permittee must limit Process Throughput $\leq$ 75.0 tons per hour 24-hour block average to be calculated daily as described later in this permit. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| EQUI 25 | 2 | The Permittee must limit Particulate Matter $\leq$ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 25 | 6430 | The Permittee must limit Opacity $\leq$ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 25 | 6440 | <p>Process Throughput: Daily Recordkeeping. On each day of operation, the Permittee must calculate, record, and maintain the following:</p> <ol style="list-style-type: none"> 1) The total quantity of material throughput; and 2) The 24-hr block average material throughput. <p>These must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| EQUI 25 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 25 | 19650 | The Permittee must vent emissions from EQUI 25 to equipment meeting the requirements of EQUI 154 whenever EQUI 25 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 25 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 26 | 1 | <p>The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]</p> |
| EQUI 26 | 2 | <p>The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]</p> |
| EQUI 26 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |

| SI Id | Sequence | Requirement |
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| EQUI 26 | 19650 | The Permittee must vent emissions from EQUI 26 to equipment meeting the requirements of EQUI 154 whenever EQUI 26 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 26 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 29 | 1 | The Permittee must limit Process Throughput $\leq$ 50.0 tons per hour 24-hour block average to be calculated daily as described later in this permit. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| EQUI 29 | 2 | The Permittee must limit Particulate Matter $\leq$ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 29 | 3 | The Permittee must limit Opacity $\leq$ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 29 | 3450 | Opacity $\leq$ 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. [Minn. R. 7011.0610, subp. 1(A)(2)] |
| EQUI 29 | 3455 | Sulfur Dioxide $\leq$ 2.0 pounds per million Btu heat input when burning liquid fossil fuels. The potential to emit from the unit is 0.000588 lb/MMBtu due to equipment design and allowable fuels. [Minn. R. 7011.0610, subp. 2] |
| EQUI 29 | 3460 | Particulate Matter $\leq$ 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. 7011.0610, subp. 1(A)(1)] |
| EQUI 29 | 3512 | Fuel type: Natural gas only, by design. [Minn. R. 7005.0100, subp. 35a] |
| EQUI 29 | 3517 | The Permittee shall keep records of fuel purchases showing fuel types. [Minn. R. 7007.0800, subp. 5] |
| EQUI 29 | 6440 | <p>Process Throughput: Daily Recordkeeping. On each day of operation, the Permittee must calculate, record, and maintain the following:</p> <p>1) The total quantity of material throughput; and
 2) The 24-hr block average material throughput.</p> <p>These must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 29 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 29 | 19650 | <p>The Permittee must vent emissions from EQUI 29 to equipment meeting the requirements of EQUI 144 whenever EQUI 29 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 29 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 30 | 1 | The Permittee must limit Process Throughput ≤ 50.0 tons per hour 24-hour block average to be calculated daily as described later in this permit. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| EQUI 30 | 2 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 30 | 3 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 30 | 6440 | <p>Process Throughput: Daily Recordkeeping. On each day of operation, the Permittee must calculate, record, and maintain the following:</p> <ol style="list-style-type: none"> 1) The total quantity of material throughput; and 2) The 24-hr block average material throughput. <p>These must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| EQUI 30 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 30 | 19650 | The Permittee must vent emissions from EQUI 30 to equipment meeting the requirements of EQUI 152 whenever EQUI 30 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |

| SI Id | Sequence | Requirement |
|---------|----------|--|
| EQUI 30 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 31 | 1 | The Permittee must limit Process Throughput $\leq$ 50.0 tons per hour 24-hour block average to be calculated daily as described later in this permit. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| EQUI 31 | 2 | The Permittee must limit Particulate Matter $\leq$ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 31 | 3 | The Permittee must limit Opacity $\leq$ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 31 | 6440 | <p>Process Throughput: Daily Recordkeeping. On each day of operation, the Permittee must calculate, record, and maintain the following:</p> <p>1) The total quantity of material throughput; and
 2) The 24-hr block average material throughput.</p> <p>These must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 31 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 31 | 19650 | <p>The Permittee must vent emissions from EQUI 31 to equipment meeting the requirements of EQUIs 150, 156 and 158 whenever EQUI 31 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 31 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 33 | 1 | The Permittee must limit Particulate Matter <= 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 33 | 2 | The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 33 | 3450 | Opacity <= 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. [Minn. R. 7011.0610, subp. 1(A)(2)] |
| EQUI 33 | 3455 | Sulfur Dioxide <= 2.0 pounds per million Btu heat input when burning liquid fossil fuels. The potential to emit from the unit is 0.000588 lb/MMBtu due to equipment design and allowable fuels. [Minn. R. 7011.0610, subp. 2] |
| EQUI 33 | 3460 | 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. 7011.0610, subp. 1(A)(1)] |
| EQUI 33 | 3512 | Fuel type: Natural gas only, by design. [Minn. R. 7005.0100, subp. 35a] |
| EQUI 33 | 3517 | The Permittee shall keep records of fuel purchases showing fuel types. [Minn. R. 7007.0800, subp. 5] |
| EQUI 33 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 33 | 19650 | The Permittee must vent emissions from EQUI 33 to equipment meeting the requirements of EQUI 145 whenever EQUI 33 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |

| SI Id | Sequence | Requirement |
|---------|----------|--|
| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 33 | 35700 | |
| EQUI 36 | 3450 | Opacity <= 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. [Minn. R. 7011.0610, subp. 1(A)(2)] |
| EQUI 36 | 3455 | Sulfur Dioxide <= 2.0 pounds per million Btu heat input when burning liquid fossil fuels. The potential to emit from the unit is 0.000588 lb/MMBtu due to equipment design and allowable fuels. [Minn. R. 7011.0610, subp. 2] |
| EQUI 36 | 3460 | 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. 7011.0610, subp. 1(A)(1)] |
| EQUI 36 | 3512 | Fuel type: Natural gas only, by design. [Minn. R. 7005.0100, subp. 35a] |
| EQUI 36 | 3517 | The Permittee shall keep records of fuel purchases showing fuel types. [Minn. R. 7007.0800, subp. 5] |
| EQUI 36 | 19650 | The Permittee must vent emissions from EQUI 36 to equipment meeting the requirements of EQUI 146 whenever EQUI 36 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 41 | 3450 | Opacity <= 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. [Minn. R. 7011.0610, subp. 1(A)(2)] |
| EQUI 41 | 3455 | Sulfur Dioxide <= 2.0 pounds per million Btu heat input when burning liquid fossil fuels. The potential to emit from the unit is 0.000588 lb/MMBtu due to equipment design and allowable fuels. [Minn. R. 7011.0610, subp. 2] |
| EQUI 41 | 3460 | 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. 7011.0610, subp. 1(A)(1)] |
| EQUI 41 | 3512 | Fuel type: Natural gas only, by design. [Minn. R. 7005.0100, subp. 35a] |
| EQUI 41 | 3517 | The Permittee shall keep records of fuel purchases showing fuel types. [Minn. R. 7007.0800, subp. 5] |
| EQUI 41 | 19650 | The Permittee must vent emissions from EQUI 41 to equipment meeting the requirements of EQUI 149 whenever EQUI 41 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 42 | 1 | The Permittee must limit Particulate Matter <= 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 42 | 2 | The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 42 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 42 | 19650 | <p>The Permittee must vent emissions from EQUI 42 to equipment meeting the requirements of EQUI 149 whenever EQUI 42 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 42 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 48 | 1 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 48 | 2 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 48 | 7230 | |
| EQUI 48 | 19650 | The Permittee must vent emissions from EQUI 48 to equipment meeting the requirements of EQUI 152 whenever EQUI 48 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 48 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 50 | 1 | <p>The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]</p> |
| EQUI 50 | 2 | <p>The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]</p> |
| EQUI 50 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|--|
| EQUI 50 | 19650 | The Permittee must vent emissions from EQUI 50 to equipment meeting the requirements of EQUI 152 whenever EQUI 50 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 50 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. 000, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 53 | 1 | The Permittee must not operate EQUI 53 during the months of December, January, and February. The Permittee shall certify that EQUI 53 did not operate during these months on form CR-04 (Annual Compliance Certification Report). [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| EQUI 53 | 2 | The Permittee must limit Process Throughput <= 7500.0 tons per day 24-hour block average. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| EQUI 53 | 6440 | Process Throughput: Daily Recordkeeping. On each day of operation the Permittee must calculate, record, and maintain a record of the total quantity material throughput. This must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| EQUI 53 | 7210 | The Permittee must limit Opacity <= 10 percent opacity. [40 CFR 60.672(b), 40 CFR pt. 60, subp. 000(Table 3), Minn. R. 7011.3350] |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 53 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(b);
 40 CFR 60.673;
 40 CFR 60.675(a)-(c);
 40 CFR 60.675(f);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a)(1)-(a)(3);
 40 CFR 60.676(b)(1);
 40 CFR 60.676(e)-(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j);
 40 CFR 60.676(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 3.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 53 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 54 | 1 | <p>The Permittee must limit Process Throughput $\leq$ 110.0 tons per hour 24-hour block average to be calculated daily as described later in this permit. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 54 | 6450 | <p>Process Throughput: Daily Recordkeeping. On each day of operation, the Permittee must calculate, record, and maintain the following:</p> <p>1) The total quantity of material throughput; and</p> <p>2) The 24-hr block average material throughput.</p> <p>These must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| EQUI 54 | 7210 | <p>The Permittee must limit Opacity <= 10 percent opacity. [40 CFR 60.672(b), 40 CFR pt. 60, subp. 000(Table 3), Minn. R. 7011.3350]</p> |
| EQUI 54 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. 000 as follows:</p> <p>40 CFR 60.670(a);</p> <p>40 CFR 60.670(d)-(f);</p> <p>40 CFR 60.671;</p> <p>40 CFR 60.672(b);</p> <p>40 CFR 60.673;</p> <p>40 CFR 60.675(a)-(c);</p> <p>40 CFR 60.675(f);</p> <p>40 CFR 60.675(g);</p> <p>40 CFR 60.675(i);</p> <p>40 CFR 60.676(a)(1)-(a)(3);</p> <p>40 CFR 60.676(b)(1);</p> <p>40 CFR 60.676(e)-(h);</p> <p>40 CFR 60.676(i)(1);</p> <p>40 CFR 60.676(j);</p> <p>40 CFR 60.676(k);</p> <p>40 CFR pt. 60, subp. 000, Table 1; and</p> <p>40 CFR pt. 60, subp. 000, Table 3.</p> <p>A copy of 40 CFR pt. 60, subp. 000 is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. 000, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|--|
| EQUI 54 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 55 | 1 | The Permittee must limit Process Throughput $\leq$ 110.0 tons per hour 24-hour block average to be calculated daily as described later in this permit. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| EQUI 55 | 3450 | Opacity $\leq$ 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. [Minn. R. 7011.0610, subp. 1(A)(2)] |
| EQUI 55 | 3455 | Sulfur Dioxide $\leq$ 2.0 pounds per million Btu heat input when burning liquid fossil fuels. If more than one fuel is burned simultaneously, calculate the emission limit as indicated in Minn. R. 7011.0605. The potential to emit from the unit is 0.0015 lb/MMBtu due to equipment design and allowable fuels. [Minn. R. 7011.0610, subp. 2] |
| EQUI 55 | 3460 | Particulate Matter $\leq$ 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. 7011.0610, subp. 1(A)(1)] |
| EQUI 55 | 3512 | Fuel type: Natural gas and No. 2 fuel oil only, by design. [Minn. R. 7005.0100, subp. 35a] |
| EQUI 55 | 3517 | The Permittee shall keep records of fuel purchases showing fuel types. [Minn. R. 7007.0800, subp. 5] |
| EQUI 55 | 6440 | <p>Process Throughput: Daily Recordkeeping. On each day of operation, the Permittee must calculate, record, and maintain the following:</p> <p>1) The total quantity of material throughput; and
 2) The 24-hr block average material throughput.</p> <p>These must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| EQUI 55 | 19650 | The Permittee must vent emissions from EQUI 55 to equipment meeting the requirements of EQUI 144 whenever EQUI 55 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 57 | 1 | The Permittee must limit Particulate Matter $\leq$ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 57 | 2 | The Permittee must limit Opacity $\leq$ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 57 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 57 | 19650 | <p>The Permittee must vent emissions from EQUI 57 to equipment meeting the requirements of EQUIs 144 and 145 whenever EQUI 57 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 57 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 59 | 1 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 59 | 2 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 59 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 59 | 19650 | The Permittee must vent emissions from EQUI 59 to equipment meeting the requirements of EQUI 144 whenever EQUI 59 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 59 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 60 | 1 | <p>The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]</p> |
| EQUI 60 | 2 | <p>The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]</p> |
| EQUI 60 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|--|
| EQUI 60 | 19650 | The Permittee must vent emissions from EQUI 60 to equipment meeting the requirements of EQUI 154 whenever EQUI 60 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 60 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 61 | 1 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 61 | 2 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 61 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 61 | 19650 | <p>The Permittee must vent emissions from EQUI 61 to equipment meeting the requirements of EQUI 154 whenever EQUI 61 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 61 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 63 | 1 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 63 | 2 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 63 | 7230 | |
| EQUI 63 | 19650 | The Permittee must vent emissions from EQUI 63 to equipment meeting the requirements of EQUI 144 whenever EQUI 63 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 63 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 64 | 1 | <p>The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]</p> |
| EQUI 64 | 2 | <p>The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]</p> |
| EQUI 64 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|--|
| EQUI 64 | 19650 | The Permittee must vent emissions from EQUI 64 to equipment meeting the requirements of EQUI 147 whenever EQUI 64 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 64 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 71 | 1 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 71 | 2 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 71 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 71 | 19650 | <p>The Permittee must vent emissions from EQUI 71 to equipment meeting the requirements of EQUI 152 whenever EQUI 71 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 71 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 72 | 1 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 72 | 2 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 72 | 7230 | |
| EQUI 72 | 19650 | The Permittee must vent emissions from EQUI 72 to equipment meeting the requirements of EQUI 152 whenever EQUI 72 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 72 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 73 | 1 | <p>The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]</p> |
| EQUI 73 | 2 | <p>The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]</p> |
| EQUI 73 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|--|
| EQUI 73 | 19650 | The Permittee must vent emissions from EQUI 73 to equipment meeting the requirements of EQUI 145 whenever EQUI 73 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 73 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 74 | 1 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 74 | 2 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 74 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 74 | 19650 | <p>The Permittee must vent emissions from EQUI 74 to equipment meeting the requirements of EQUI 148 whenever EQUI 74 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 74 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 75 | 1 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 75 | 2 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 75 | 7230 | |
| EQUI 75 | 19650 | The Permittee must vent emissions from EQUI 75 to equipment meeting the requirements of EQUIs 150, 156 and 158 whenever EQUI 75 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 75 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 76 | 1 | <p>The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]</p> |
| EQUI 76 | 2 | <p>The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]</p> |
| EQUI 76 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|--|
| EQUI 76 | 19650 | The Permittee must vent emissions from EQUI 76 to equipment meeting the requirements of EQUIs 150, 156 and 158 whenever EQUI 76 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 76 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 77 | 1 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 77 | 2 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 77 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 77 | 19650 | <p>The Permittee must vent emissions from EQUI 77 to equipment meeting the requirements of EQUI 151 whenever EQUI 77 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 77 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 80 | 1 | The Permittee must limit Process Throughput ≤ 110.0 tons per hour 24-hour block average to be calculated daily as described later in this permit. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| EQUI 80 | 2 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 80 | 3 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 80 | 6440 | <p>Process Throughput: Daily Recordkeeping. On each day of operation, the Permittee must calculate, record, and maintain the following:</p> <ol style="list-style-type: none"> 1) The total quantity of material throughput; and 2) The 24-hr block average material throughput. <p>These must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| EQUI 80 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 80 | 19650 | The Permittee must vent emissions from EQUI 80 to equipment meeting the requirements of EQUI 144 whenever EQUI 80 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |

| SI Id | Sequence | Requirement |
|---------|----------|--|
| EQUI 80 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 81 | 1 | Particulate Matter $\leq$ 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)] |
| EQUI 81 | 2 | Opacity $\leq$ 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)] |
| EQUI 81 | 19650 | The Permittee must vent emissions from EQUI 81 to equipment meeting the requirements of EQUI 144 whenever EQUI 81 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 82 | 1 | The Permittee must limit Process Throughput $\leq$ 50.0 tons per hour 24-hour block average to be calculated daily as described later in this permit. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| EQUI 82 | 2 | The Permittee must limit Particulate Matter $\leq$ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 82 | 3 | The Permittee must limit Opacity $\leq$ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 82 | 6440 | <p>Process Throughput: Daily Recordkeeping. On each day of operation, the Permittee must calculate, record, and maintain the following:</p> <p>1) The total quantity of material throughput; and
 2) The 24-hr block average material throughput.</p> <p>These must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 82 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 82 | 19650 | <p>The Permittee must vent emissions from EQUI 82 to equipment meeting the requirements of EQUIs 144 and 145 whenever EQUI 82 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 82 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 86 | 1 | The Permittee must limit Process Throughput $\leq$ 50.0 tons per hour 24-hour block average to be calculated daily as described later in this permit. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| EQUI 86 | 2 | The Permittee must limit Particulate Matter $\leq$ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 86 | 3 | The Permittee must limit Opacity $\leq$ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 86 | 6440 | <p>Process Throughput: Daily Recordkeeping. On each day of operation, the Permittee must calculate, record, and maintain the following:</p> <ol style="list-style-type: none"> 1) The total quantity of material throughput; and 2) The 24-hr block average material throughput. <p>These must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| EQUI 86 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 86 | 19650 | The Permittee must vent emissions from EQUI 86 to equipment meeting the requirements of EQUI 153 whenever EQUI 86 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |

| SI Id | Sequence | Requirement |
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| EQUI 86 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 87 | 1 | <p>The Permittee must limit Process Throughput ≤ 50.0 tons per hour 24-hour block average to be calculated daily as described later in this permit. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| EQUI 87 | 2 | <p>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)]</p> |
| EQUI 87 | 3 | <p>Opacity ≤ 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)]</p> |
| EQUI 87 | 6440 | <p>Process Throughput: Daily Recordkeeping. On each day of operation, the Permittee must calculate, record, and maintain the following:</p> <p>1) The total quantity of material throughput; and
 2) The 24-hr block average material throughput.</p> <p>These must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| EQUI 87 | 19650 | <p>The Permittee must vent emissions from EQUI 87 to equipment meeting the requirements of EQUI 144 whenever EQUI 87 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 88 | 1 | <p>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)]</p> |
| EQUI 88 | 2 | <p>Opacity ≤ 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)]</p> |
| EQUI 88 | 19650 | <p>The Permittee must vent emissions from EQUI 88 to equipment meeting the requirements of EQUI 144 whenever EQUI 88 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 89 | 1 | <p>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)]</p> |
| EQUI 89 | 2 | <p>Opacity ≤ 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 89 | 19650 | The Permittee must vent emissions from EQUI 89 to equipment meeting the requirements of EQUI 145 whenever EQUI 89 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 90 | 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)] |
| EQUI 90 | 2 | Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)] |
| EQUI 90 | 19650 | The Permittee must vent emissions from EQUI 90 to equipment meeting the requirements of EQUIs 153 and 155 whenever EQUI 90 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 91 | 3680 | 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)] |
| EQUI 91 | 3690 | Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)] |
| EQUI 91 | 19650 | The Permittee must vent emissions from EQUI 91 to equipment meeting the requirements of EQUI 158 whenever EQUI 91 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 92 | 1 | The Permittee must limit Particulate Matter <= 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 92 | 2 | The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 92 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 92 | 19650 | The Permittee must vent emissions from EQUI 92 to equipment meeting the requirements of EQUI 154 whenever EQUI 92 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |

| SI Id | Sequence | Requirement |
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| EQUI 92 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 93 | 1 | <p>The Permittee must limit Process Throughput ≤ 50.0 tons per hour 24-hour block average to be calculated daily as described later in this permit. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| EQUI 93 | 6450 | <p>Process Throughput: Daily Recordkeeping. On each day of operation, the Permittee must calculate, record, and maintain the following:</p> <p>1) The total quantity of material throughput; and
 2) The 24-hr block average material throughput.</p> <p>These must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| EQUI 93 | 7220 | <p>The Permittee must limit Opacity ≤ 15 percent opacity. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 93 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(b);
 40 CFR 60.673;
 40 CFR 60.675(a)-(c);
 40 CFR 60.675(f);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a)(1)-(a)(3);
 40 CFR 60.676(b)(1);
 40 CFR 60.676(e)-(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j);
 40 CFR 60.676(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 3.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 93 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 94 | 1 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 94 | 2 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 94 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 94 | 19650 | <p>The Permittee must vent emissions from EQUI 94 to equipment meeting the requirements of EQUI 154 whenever EQUI 94 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 94 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 95 | 1 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 95 | 2 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 95 | 7230 | |
| EQUI 95 | 19650 | The Permittee must vent emissions from EQUI 95 to equipment meeting the requirements of EQUIs 153 and 154 whenever EQUI 95 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |

| SI Id | Sequence | Requirement |
|---------|----------|--|
| EQUI 95 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 96 | 1 | The Permittee must limit Process Throughput $\leq$ 50.0 tons per hour 24-hour block average to be calculated daily as described later in this permit. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| EQUI 96 | 2 | The Permittee must limit Particulate Matter $\leq$ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 96 | 3 | The Permittee must limit Opacity $\leq$ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 96 | 6440 | <p>Process Throughput: Daily Recordkeeping. On each day of operation, the Permittee must calculate, record, and maintain the following:</p> <p>1) The total quantity of material throughput; and
 2) The 24-hr block average material throughput.</p> <p>These must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |

| SI Id | Sequence | Requirement |
|---------|----------|---|
| EQUI 96 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 96 | 19650 | <p>The Permittee must vent emissions from EQUI 96 to equipment meeting the requirements of EQUI 144 whenever EQUI 96 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 96 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |

| SI Id | Sequence | Requirement |
|----------|----------|---|
| EQUI 98 | 1 | The Permittee must limit Process Throughput <= 40.0 tons per hour 24-hour block average to be calculated daily as described later in this permit. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| EQUI 98 | 2 | 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)] |
| EQUI 98 | 3 | Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)] |
| EQUI 98 | 6440 | Process Throughput: Daily Recordkeeping. On each day of operation, the Permittee must calculate, record, and maintain the following:
1) The total quantity of material throughput; and
2) The 24-hr block average material throughput.
These must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| EQUI 98 | 19650 | The Permittee must vent emissions from EQUI 98 to equipment meeting the requirements of EQUI 152 whenever EQUI 98 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 99 | 1 | The Permittee must limit Process Throughput <= 40.0 tons per hour 24-hour block average to be calculated daily as described later in this permit. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| EQUI 99 | 2 | 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)] |
| EQUI 99 | 3 | Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)] |
| EQUI 99 | 6440 | Process Throughput: Daily Recordkeeping. On each day of operation, the Permittee must calculate, record, and maintain the following:
1) The total quantity of material throughput; and
2) The 24-hr block average material throughput.
These must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| EQUI 99 | 19650 | The Permittee must vent emissions from EQUI 99 to equipment meeting the requirements of EQUIs 152 and 157 whenever EQUI 99 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 100 | 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)] |
| EQUI 100 | 2 | Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)] |
| EQUI 100 | 19650 | The Permittee must vent emissions from EQUI 100 to equipment meeting the requirements of EQUI 146 whenever EQUI 100 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 101 | 1 | The Permittee must limit Particulate Matter <= 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 101 | 2 | The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |

| SI Id | Sequence | Requirement |
|----------|----------|---|
| EQUI 101 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 101 | 19650 | <p>The Permittee must vent emissions from EQUI 101 to equipment meeting the requirements of EQUIs 147 and 151 whenever EQUI 101 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 101 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |

| SI Id | Sequence | Requirement |
|----------|----------|---|
| EQUI 102 | 1 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 102 | 2 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 102 | 7230 | |
| EQUI 102 | 19650 | The Permittee must vent emissions from EQUI 102 to equipment meeting the requirements of EQUI 154 whenever EQUI 102 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |

| SI Id | Sequence | Requirement |
|----------|----------|---|
| EQUI 102 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 103 | 7210 | <p>The Permittee must limit Opacity <= 10 percent opacity. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350]</p> |
| EQUI 103 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(b);
 40 CFR 60.673;
 40 CFR 60.675(a)-(c);
 40 CFR 60.675(f);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a)(1)-(a)(3);
 40 CFR 60.676(b)(1);
 40 CFR 60.676(e)-(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j);
 40 CFR 60.676(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 3.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |

| SI Id | Sequence | Requirement |
|----------|----------|--|
| EQUI 103 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| | | |
| EQUI 104 | 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)] |
| EQUI 104 | 2 | Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)] |
| EQUI 104 | 19650 | The Permittee must vent emissions from EQUI 104 to equipment meeting the requirements of EQUI 153 whenever EQUI 104 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 105 | 1 | The Permittee must limit Particulate Matter <= 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 105 | 2 | The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |

| SI Id | Sequence | Requirement |
|----------|----------|---|
| EQUI 105 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 105 | 19650 | <p>The Permittee must vent emissions from EQUI 105 to equipment meeting the requirements of EQUI 154 whenever EQUI 105 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 105 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |

| SI Id | Sequence | Requirement |
|----------|----------|---|
| EQUI 106 | 1 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 106 | 2 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 106 | 7230 | |
| EQUI 106 | 19650 | The Permittee must vent emissions from EQUI 106 to equipment meeting the requirements of EQUI 152 whenever EQUI 106 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |

| SI Id | Sequence | Requirement |
|----------|----------|---|
| EQUI 106 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| | | |
| EQUI 107 | 1 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 107 | 2 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 107 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| | | |

| SI Id | Sequence | Requirement |
|----------|----------|--|
| EQUI 107 | 19650 | The Permittee must vent emissions from EQUI 107 to equipment meeting the requirements of EQUI 154 whenever EQUI 107 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 107 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 108 | 1 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 108 | 2 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |

| SI Id | Sequence | Requirement |
|----------|----------|---|
| EQUI 108 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 108 | 19650 | <p>The Permittee must vent emissions from EQUI 108 to equipment meeting the requirements of EQUI 157 whenever EQUI 108 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 108 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |

| SI Id | Sequence | Requirement |
|----------|----------|---|
| EQUI 109 | 1 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 109 | 2 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 109 | 7230 | |
| EQUI 109 | 19650 | The Permittee must vent emissions from EQUI 109 to equipment meeting the requirements of EQUI 157 whenever EQUI 109 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |

| SI Id | Sequence | Requirement |
|----------|----------|---|
| EQUI 109 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 110 | 1 | <p>The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]</p> |
| EQUI 110 | 2 | <p>The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]</p> |
| EQUI 110 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |

| SI Id | Sequence | Requirement |
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| EQUI 110 | 19650 | The Permittee must vent emissions from EQUI 110 to equipment meeting the requirements of EQUI 154 whenever EQUI 110 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 110 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. 000, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 116 | 1 | The Permittee must not operate EQUI 116 during the months of December, January, and February. The Permittee shall certify that EQUI 116 did not operate during these months on form CR-04 (Annual Compliance Certification Report). [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, |
| EQUI 116 | 2 | The Permittee must limit Process Throughput <= 7500.0 tons per day 24-hour block average. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| EQUI 116 | 6450 | Process Throughput: Daily Recordkeeping. On each day of operation the Permittee must calculate, record, and maintain a record of the total quantity material throughput. This must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| EQUI 116 | 7240 | The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(b), 40 CFR pt. 60, subp. 000(Table 3), Minn. R. 7011.3350] |

| SI Id | Sequence | Requirement |
|----------|----------|--|
| EQUI 116 | 7260 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(b);
 40 CFR 60.673;
 40 CFR 60.674(b);
 40 CFR 60.675(a)-(c);
 40 CFR 60.675(f);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a)(1)-(a)(3);
 40 CFR 60.676(b)(1);
 40 CFR 60.676(e)-(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j);
 40 CFR 60.676(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 3.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| | 20045 | <p>Opacity: The Permittee shall conduct a performance test due before 4/17/2029 and every 60 months thereafter to measure opacity.</p> <p>The first test is due by the date specified above and all subsequent tests shall be completed every 60 months thereafter by the due date (month and day) and as described below. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 9, or other method approved by MPCA in the performance test plan approval.</p> <p>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.</p> <p>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. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350, Minn. R. 7017.2020, subp. 1]</p> |

| SI Id | Sequence | Requirement |
|----------|----------|--|
| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 116 | 35700 | |
| EQUI 116 | 35730 | <p>The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]</p> |
| EQUI 118 | 1 | <p>The Permittee must not operate EQUI 118 during the months of December, January, and February. The Permittee shall certify that EQUI 118 did not operate during these months on form CR-04 (Annual Compliance Certification Report). [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07,</p> |
| EQUI 118 | 2 | <p>The Permittee must limit Process Throughput <= 7500.0 tons per day 24-hour block average. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| EQUI 118 | 6450 | <p>Process Throughput: Daily Recordkeeping. On each day of operation the Permittee must calculate, record, and maintain a record of the total quantity material throughput. This must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| EQUI 118 | 7240 | <p>The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350]</p> |

| SI Id | Sequence | Requirement |
|----------|----------|--|
| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(b);
 40 CFR 60.673;
 40 CFR 60.674(b);
 40 CFR 60.675(a)-(c);
 40 CFR 60.675(f);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a)(1)-(a)(3);
 40 CFR 60.676(b)(1);
 40 CFR 60.676(e)-(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j);
 40 CFR 60.676(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 3.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 118 | 7260 | |
| | | <p>Opacity: The Permittee shall conduct a performance test due before 4/17/2029 and every 60 months thereafter to measure opacity.</p> <p>The first test is due by the date specified above and all subsequent tests shall be completed every 60 months thereafter by the due date (month and day) and as described below. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 9, or other method approved by MPCA in the performance test plan approval.</p> <p>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.</p> <p>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. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350, Minn. R. 7017.2020, subp. 1]</p> |
| EQUI 118 | 20045 | |

| SI Id | Sequence | Requirement |
|----------|----------|--|
| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 118 | 35700 | |
| EQUI 118 | 35730 | <p>The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]</p> |
| EQUI 119 | 1 | <p>The Permittee must not operate EQUI 119 during the months of December, January, and February. The Permittee shall certify that EQUI 119 did not operate during these months on form CR-04 (Annual Compliance Certification Report). [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07,</p> |
| EQUI 119 | 2 | <p>The Permittee must limit Process Throughput <= 7500.0 tons per day 24-hour block average. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| EQUI 119 | 6450 | <p>Process Throughput: Daily Recordkeeping. On each day of operation the Permittee must calculate, record, and maintain a record of the total quantity material throughput. This must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| EQUI 119 | 7240 | <p>The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350]</p> |

| SI Id | Sequence | Requirement |
|----------|----------|--|
| EQUI 119 | 7260 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(b);
 40 CFR 60.673;
 40 CFR 60.674(b);
 40 CFR 60.675(a)-(c);
 40 CFR 60.675(f);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a)(1)-(a)(3);
 40 CFR 60.676(b)(1);
 40 CFR 60.676(e)-(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j);
 40 CFR 60.676(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 3.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| | 20045 | <p>Opacity: The Permittee shall conduct a performance test due before 4/17/2029 and every 60 months thereafter to measure opacity.</p> <p>The first test is due by the date specified above and all subsequent tests shall be completed every 60 months thereafter by the due date (month and day) and as described below. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 9, or other method approved by MPCA in the performance test plan approval.</p> <p>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.</p> <p>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. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350, Minn. R. 7017.2020, subp. 1]</p> |

| SI Id | Sequence | Requirement |
|----------|----------|--|
| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 119 | 35700 | |
| EQUI 119 | 35730 | <p>The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]</p> |
| EQUI 120 | 1 | <p>The Permittee must not operate EQUI 120 during the months of December, January, and February. The Permittee shall certify that EQUI 120 did not operate during these months on form CR-04 (Annual Compliance Certification Report). [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07,</p> |
| EQUI 120 | 2 | <p>The Permittee must limit Process Throughput <= 7500.0 tons per day 24-hour block average. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| EQUI 120 | 6450 | <p>Process Throughput: Daily Recordkeeping. On each day of operation the Permittee must calculate, record, and maintain a record of the total quantity material throughput. This must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| EQUI 120 | 7240 | <p>The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350]</p> |

| SI Id | Sequence | Requirement |
|----------|----------|--|
| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(b);
 40 CFR 60.673;
 40 CFR 60.674(b);
 40 CFR 60.675(a)-(c);
 40 CFR 60.675(f);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a)(1)-(a)(3);
 40 CFR 60.676(b)(1);
 40 CFR 60.676(e)-(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j);
 40 CFR 60.676(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 3.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 120 | 7260 | |
| | | <p>Opacity: The Permittee shall conduct a performance test due before 4/17/2029 and every 60 months thereafter to measure opacity.</p> <p>The first test is due by the date specified above and all subsequent tests shall be completed every 60 months thereafter by the due date (month and day) and as described below. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 9, or other method approved by MPCA in the performance test plan approval.</p> <p>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.</p> <p>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. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350, Minn. R. 7017.2020, subp. 1]</p> |
| EQUI 120 | 20045 | |

| SI Id | Sequence | Requirement |
|----------|----------|--|
| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 120 | 35700 | |
| EQUI 120 | 35730 | The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1] |
| EQUI 121 | 1 | The Permittee must not operate EQUI 121 during the months of December, January, and February. The Permittee shall certify that EQUI 121 did not operate during these months on form CR-04 (Annual Compliance Certification Report). [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, |
| EQUI 121 | 2 | The Permittee must limit Process Throughput <= 7500.0 tons per day 24-hour block average. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| EQUI 121 | 6450 | Process Throughput: Daily Recordkeeping. On each day of operation the Permittee must calculate, record, and maintain a record of the total quantity material throughput. This must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| EQUI 121 | 7240 | The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350] |

| SI Id | Sequence | Requirement |
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| EQUI 121 | 7260 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(b);
 40 CFR 60.673;
 40 CFR 60.674(b);
 40 CFR 60.675(a)-(c);
 40 CFR 60.675(f);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a)(1)-(a)(3);
 40 CFR 60.676(b)(1);
 40 CFR 60.676(e)-(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j);
 40 CFR 60.676(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 3.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| | 20045 | <p>Opacity: The Permittee shall conduct a performance test due before 4/17/2029 and every 60 months thereafter to measure opacity.</p> <p>The first test is due by the date specified above and all subsequent tests shall be completed every 60 months thereafter by the due date (month and day) and as described below. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 9, or other method approved by MPCA in the performance test plan approval.</p> <p>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.</p> <p>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. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350, Minn. R. 7017.2020, subp. 1]</p> |

| SI Id | Sequence | Requirement |
|----------|----------|--|
| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 121 | 35700 | |
| EQUI 121 | 35730 | The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1] |
| EQUI 122 | 1 | The Permittee must not operate EQUI 122 during the months of December, January, and February. The Permittee shall certify that EQUI 122 did not operate during these months on form CR-04 (Annual Compliance Certification Report). [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, |
| EQUI 122 | 2 | The Permittee must limit Process Throughput <= 7500.0 tons per day 24-hour block average. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| EQUI 122 | 6450 | Process Throughput: Daily Recordkeeping. On each day of operation the Permittee must calculate, record, and maintain a record of the total quantity material throughput. This must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| EQUI 122 | 7240 | The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350] |

| SI Id | Sequence | Requirement |
|----------|----------|--|
| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(b);
 40 CFR 60.673;
 40 CFR 60.674(b);
 40 CFR 60.675(a)-(c);
 40 CFR 60.675(f);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a)(1)-(a)(3);
 40 CFR 60.676(b)(1);
 40 CFR 60.676(e)-(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j);
 40 CFR 60.676(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 3.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 122 | 7260 | |
| | | <p>Opacity: The Permittee shall conduct a performance test due before 4/17/2029 and every 60 months thereafter to measure opacity.</p> <p>The first test is due by the date specified above and all subsequent tests shall be completed every 60 months thereafter by the due date (month and day) and as described below. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 9, or other method approved by MPCA in the performance test plan approval.</p> <p>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.</p> <p>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. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350, Minn. R. 7017.2020, subp. 1]</p> |
| EQUI 122 | 20045 | |

| SI Id | Sequence | Requirement |
|----------|----------|--|
| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 122 | 35700 | |
| EQUI 122 | 35730 | <p>The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]</p> |
| EQUI 123 | 1 | <p>The Permittee must not operate EQUI 123 during the months of December, January, and February. The Permittee shall certify that EQUI 123 did not operate during these months on form CR-04 (Annual Compliance Certification Report). [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07,</p> |
| EQUI 123 | 2 | <p>The Permittee must limit Process Throughput <= 7500.0 tons per day 24-hour block average. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| EQUI 123 | 6450 | <p>Process Throughput: Daily Recordkeeping. On each day of operation the Permittee must calculate, record, and maintain a record of the total quantity material throughput. This must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| EQUI 123 | 7240 | <p>The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350]</p> |

| SI Id | Sequence | Requirement |
|----------|----------|--|
| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(b);
 40 CFR 60.673;
 40 CFR 60.674(b);
 40 CFR 60.675(a)-(c);
 40 CFR 60.675(f);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a)(1)-(a)(3);
 40 CFR 60.676(b)(1);
 40 CFR 60.676(e)-(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j);
 40 CFR 60.676(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 3.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 123 | 7260 | |
| | | <p>Opacity: The Permittee shall conduct a performance test due before 4/17/2029 and every 60 months thereafter to measure opacity.</p> <p>The first test is due by the date specified above and all subsequent tests shall be completed every 60 months thereafter by the due date (month and day) and as described below. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 9, or other method approved by MPCA in the performance test plan approval.</p> <p>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.</p> <p>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. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350, Minn. R. 7017.2020, subp. 1]</p> |
| EQUI 123 | 20045 | |

| SI Id | Sequence | Requirement |
|----------|----------|--|
| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 123 | 35700 | |
| EQUI 123 | 35730 | The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1] |
| EQUI 124 | 1 | The Permittee must not operate EQUI 124 during the months of December, January, and February. The Permittee shall certify that EQUI 124 did not operate during these months on form CR-04 (Annual Compliance Certification Report). [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, |
| EQUI 124 | 2 | The Permittee must limit Process Throughput <= 7500.0 tons per day 24-hour block average. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| EQUI 124 | 6450 | Process Throughput: Daily Recordkeeping. On each day of operation the Permittee must calculate, record, and maintain a record of the total quantity material throughput. This must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| EQUI 124 | 7240 | The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350] |

| SI Id | Sequence | Requirement |
|----------|----------|--|
| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(b);
 40 CFR 60.673;
 40 CFR 60.674(b);
 40 CFR 60.675(a)-(c);
 40 CFR 60.675(f);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a)(1)-(a)(3);
 40 CFR 60.676(b)(1);
 40 CFR 60.676(e)-(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j);
 40 CFR 60.676(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 3.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 124 | 7260 | |
| | | <p>Opacity: The Permittee shall conduct a performance test due before 4/17/2029 and every 60 months thereafter to measure opacity.</p> <p>The first test is due by the date specified above and all subsequent tests shall be completed every 60 months thereafter by the due date (month and day) and as described below. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 9, or other method approved by MPCA in the performance test plan approval.</p> <p>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.</p> <p>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. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350, Minn. R. 7017.2020, subp. 1]</p> |
| EQUI 124 | 20045 | |

| SI Id | Sequence | Requirement |
|----------|----------|--|
| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 124 | 35700 | |
| EQUI 124 | 35730 | <p>The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]</p> |
| EQUI 125 | 1 | <p>The Permittee must not operate EQUI 125 during the months of December, January, and February. The Permittee shall certify that EQUI 125 did not operate during these months on form CR-04 (Annual Compliance Certification Report). [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07,</p> |
| EQUI 125 | 2 | <p>The Permittee must limit Process Throughput <= 7500.0 tons per day 24-hour block average. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| EQUI 125 | 6450 | <p>Process Throughput: Daily Recordkeeping. On each day of operation the Permittee must calculate, record, and maintain a record of the total quantity material throughput. This must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]</p> |
| EQUI 125 | 7240 | <p>The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350]</p> |

| SI Id | Sequence | Requirement |
|----------|----------|--|
| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(b);
 40 CFR 60.673;
 40 CFR 60.674(b);
 40 CFR 60.675(a)-(c);
 40 CFR 60.675(f);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a)(1)-(a)(3);
 40 CFR 60.676(b)(1);
 40 CFR 60.676(e)-(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j);
 40 CFR 60.676(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 3.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 125 | 7260 | |
| | | <p>Opacity: The Permittee shall conduct a performance test due before 4/17/2029 and every 60 months thereafter to measure opacity.</p> <p>The first test is due by the date specified above and all subsequent tests shall be completed every 60 months thereafter by the due date (month and day) and as described below. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 9, or other method approved by MPCA in the performance test plan approval.</p> <p>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.</p> <p>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. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350, Minn. R. 7017.2020, subp. 1]</p> |
| EQUI 125 | 20045 | |

| SI Id | Sequence | Requirement |
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| EQUI 125 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 125 | 35730 | <p>The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]</p> |
| EQUI 126 | 1 | <p>The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]</p> |
| EQUI 126 | 2 | <p>The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350]</p> |

| SI Id | Sequence | Requirement |
|----------|----------|---|
| EQUI 126 | 7230 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 126 | 19650 | <p>The Permittee must vent emissions from EQUI 126 to equipment meeting the requirements of EQUI 148 whenever EQUI 126 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 126 | 35700 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |

| SI Id | Sequence | Requirement |
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| EQUI 127 | 1 | The Permittee must limit Particulate Matter ≤ 0.022 grains per dry standard cubic foot (0.05 grams per dry standard cubic meter). [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| EQUI 127 | 2 | The Permittee must limit Opacity ≤ 7 percent opacity. [40 CFR 60.672(a), 40 CFR pt. 60, subp. OOO(Table 2), Minn. R. 7011.3350] |
| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(a);
 40 CFR 60.672(f);
 40 CFR 60.673;
 40 CFR 60.675(a)-(b);
 40 CFR 60.675(c)(2);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a);
 40 CFR 60.676(f);
 40 CFR 60.676(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j)-(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 2.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 127 | 7230 | |
| EQUI 127 | 19650 | The Permittee must vent emissions from EQUI 127 to equipment meeting the requirements of EQUI 148 whenever EQUI 127 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |

| SI Id | Sequence | Requirement |
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| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 127 | 35700 | |
| EQUI 128 | 1 | <p>The Permittee must not operate EQUI 128 during the months of December, January, and February. The Permittee shall certify that EQUI 128 did not operate during these months on form CR-04 (Annual Compliance Certification Report). [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07,</p> |
| EQUI 128 | 7240 | <p>The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350]</p> |

| SI Id | Sequence | Requirement |
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| EQUI 128 | 7260 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(b);
 40 CFR 60.673;
 40 CFR 60.674(b);
 40 CFR 60.675(a)-(c);
 40 CFR 60.675(f);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a)(1)-(a)(3);
 40 CFR 60.676(b)(1);
 40 CFR 60.676(e)-(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j);
 40 CFR 60.676(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 3.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| | 20045 | <p>Opacity: The Permittee shall conduct a performance test due before 180 days following Permit Issuance Date and every 60 months thereafter to measure opacity.</p> <p>The first test is due by the date specified above and all subsequent tests shall be completed every 60 months thereafter by the due date (month and day) and as described below. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 9, or other method approved by MPCA in the performance test plan approval.</p> <p>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.</p> <p>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. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350, Minn. R. 7017.2020, subp. 1]</p> |

| SI Id | Sequence | Requirement |
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| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 128 | 35700 | |
| EQUI 128 | 35730 | <p>The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]</p> |
| EQUI 129 | 1 | <p>The Permittee must not operate EQUI 129 during the months of December, January, and February. The Permittee shall certify that EQUI 129 did not operate during these months on form CR-04 (Annual Compliance Certification Report). [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07,</p> |
| EQUI 129 | 7240 | <p>The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350]</p> |

| SI Id | Sequence | Requirement |
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| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(b);
 40 CFR 60.673;
 40 CFR 60.674(b);
 40 CFR 60.675(a)-(c);
 40 CFR 60.675(f);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a)(1)-(a)(3);
 40 CFR 60.676(b)(1);
 40 CFR 60.676(e)-(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j);
 40 CFR 60.676(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 3.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 129 | 7260 | |
| | | <p>Opacity: The Permittee shall conduct a performance test due before 180 days following Permit Issuance Date and every 60 months thereafter to measure opacity.</p> <p>The first test is due by the date specified above and all subsequent tests shall be completed every 60 months thereafter by the due date (month and day) and as described below. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 9, or other method approved by MPCA in the performance test plan approval.</p> <p>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.</p> <p>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. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350, Minn. R. 7017.2020, subp. 1]</p> |
| EQUI 129 | 20045 | |

| SI Id | Sequence | Requirement |
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| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 129 | 35700 | |
| EQUI 129 | 35730 | <p>The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1]</p> |
| EQUI 130 | 1 | <p>The Permittee must not operate EQUI 130 during the months of December, January, and February. The Permittee shall certify that EQUI 130 did not operate during these months on form CR-04 (Annual Compliance Certification Report). [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07,</p> |
| EQUI 130 | 7240 | <p>The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350]</p> |

| SI Id | Sequence | Requirement |
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| EQUI 130 | 7260 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(b);
 40 CFR 60.673;
 40 CFR 60.674(b);
 40 CFR 60.675(a)-(c);
 40 CFR 60.675(f);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a)(1)-(a)(3);
 40 CFR 60.676(b)(1);
 40 CFR 60.676(e)-(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j);
 40 CFR 60.676(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 3.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| | 20045 | <p>Opacity: The Permittee shall conduct a performance test due before 180 days following Permit Issuance Date and every 60 months thereafter to measure opacity.</p> <p>The first test is due by the date specified above and all subsequent tests shall be completed every 60 months thereafter by the due date (month and day) and as described below. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 9, or other method approved by MPCA in the performance test plan approval.</p> <p>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.</p> <p>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. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350, Minn. R. 7017.2020, subp. 1]</p> |

| SI Id | Sequence | Requirement |
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| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 130 | 35700 | |
| EQUI 130 | 35730 | The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1] |
| EQUI 131 | 1 | The Permittee must not operate EQUI 131 during the months of December, January, and February. The Permittee shall certify that EQUI 131 did not operate during these months on form CR-04 (Annual Compliance Certification Report). [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, |
| EQUI 131 | 3680 | 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)] |
| EQUI 131 | 3690 | Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)] |
| EQUI 132 | 1 | The Permittee must not operate EQUI 132 during the months of December, January, and February. The Permittee shall certify that EQUI 132 did not operate during these months on form CR-04 (Annual Compliance Certification Report). [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, |
| EQUI 132 | 3680 | 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)] |
| EQUI 132 | 3690 | Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)] |
| EQUI 133 | 1 | The Permittee must not operate EQUI 133 during the months of December, January, and February. The Permittee shall certify that EQUI 133 did not operate during these months on form CR-04 (Annual Compliance Certification Report). [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, |
| EQUI 133 | 3680 | 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)] |
| EQUI 133 | 3690 | Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)] |
| EQUI 134 | 1 | The Permittee must not operate EQUI 134 during the months of December, January, and February. The Permittee shall certify that EQUI 134 did not operate during these months on form CR-04 (Annual Compliance Certification Report). [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, |
| EQUI 134 | 3680 | 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)] |

| SI Id | Sequence | Requirement |
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| EQUI 134 | 3690 | Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)] |
| EQUI 135 | 1 | The Permittee must not operate EQUI 135 during the months of December, January, and February. The Permittee shall certify that EQUI 135 did not operate during these months on form CR-04 (Annual Compliance Certification Report). [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, |
| EQUI 135 | 3680 | 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)] |
| EQUI 135 | 3690 | Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)] |
| EQUI 143 | 1 | The Permittee must not operate EQUI 143 during the months of December, January, and February. The Permittee shall certify that EQUI 143 did not operate during these months on form CR-04 (Annual Compliance Certification Report). [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, |
| EQUI 143 | 3680 | 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)] |
| EQUI 143 | 3690 | Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)] |
| EQUI 144 | 17610 | Pressure Drop >= 1.50 and <= 8.0 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change.

If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. The Permittee shall record the pressure drop at least once every 24 hours when in operation. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 144 | 17615 | The Permittee must vent emissions from EQUIs 1, 29, 55, 57, 59, 63, 80, 81, 82, 87, 88, and 96 to EQUI 144 whenever EQUIs 1, 29, 55, 57, 59, 63, 80, 81, 82, 87, 88, and 96 operate, and maintain EQUI 144 at all times that any emissions are vented to EQUI 144. The Permittee must document periods of non-operation of the control equipment EQUI 144 whenever EQUIs 1, 29, 55, 57, 59, 63, 80, 81, 82, 87, 88, and 96 are operating. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 144 | 18510 | If the Permittee replaces EQUI 144, the replacement unit must comply with all requirements of EQUI 144. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.

If no amendment is needed for the replacement, the Permittee shall submit a written notification. The notification must be received by the Agency seven working days prior to the commencement/start of replacement. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 144 | 18520 | Visible Emissions: The Permittee shall check the fabric filter stack STRU 1 for any visible emissions once each day of operation during daylight hours. If there are visible emissions, the emissions shall be considered uncontrolled until there are no longer visible emissions. The period of time for which there are visible emissions shall be reported as a deviation.

During inclement weather, the Permittee shall read and record the pressure drop across the fabric filter, once each day of operation. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 144 | 18540 | Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |

| SI Id | Sequence | Requirement |
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| EQUI 144 | 18550 | <p>Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur:</p> <ul style="list-style-type: none"> - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. <p>Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]</p> |
| EQUI 144 | 18560 | <p>Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]</p> |
| EQUI 144 | 18565 | <p>The Permittee shall calibrate or replace the pressure drop monitor at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]</p> |
| EQUI 144 | 18570 | <p>Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]</p> |
| EQUI 144 | 19640 | <p>The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]</p> |
| EQUI 145 | 17610 | <p>Pressure Drop ≥ 1.50 and ≤ 10.0 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change.</p> <p>If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. The Permittee shall record the pressure drop at least once every 24 hours when in operation. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 145 | 17615 | <p>The Permittee must vent emissions from EQUIs 33, 57, 73, 82, 89, and 159 to EQUI 145 whenever EQUIs 33, 57, 73, 82, 89, and 159 operate, and maintain EQUI 145 at all times that any emissions are vented to EQUI 145. The Permittee must document periods of non-operation of the control equipment EQUI 145 whenever EQUIs 33, 57, 73, 82, 89, and 159 are operating. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 145 | 18510 | <p>If the Permittee replaces EQUI 145, the replacement unit must comply with all requirements of EQUI 145. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.</p> <p>If no amendment is needed for the replacement, the Permittee shall submit a written notification. The notification must be received by the Agency seven working days prior to the commencement/start of replacement. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 145 | 18520 | <p>Visible Emissions: The Permittee shall check the fabric filter stack STRU 3 for any visible emissions once each day of operation during daylight hours. If there are visible emissions, the emissions shall be considered uncontrolled until there are no longer visible emissions. The period of time for which there are visible emissions shall be reported as a deviation.</p> <p>During inclement weather, the Permittee shall read and record the pressure drop across the fabric filter, once each day of operation. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |

| SI Id | Sequence | Requirement |
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| EQUI 145 | 18540 | Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 145 | 18550 | Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur:
- visible emissions are observed;
- the recorded pressure drop is outside the required operating range; or
- the fabric filter or any of its components are found during the inspections to need repair.
Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5] |
| EQUI 145 | 18560 | Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4] |
| EQUI 145 | 18565 | The Permittee shall calibrate or replace the pressure drop monitor at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5] |
| EQUI 145 | 18570 | Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5] |
| EQUI 145 | 19640 | The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14] |
| EQUI 146 | 17610 | Pressure Drop ≥ 1.50 and ≤ 10.0 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change.

If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. The Permittee shall record the pressure drop at least once every 24 hours when in operation. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 146 | 17615 | The Permittee must vent emissions from EQUIs 36 and 100 to EQUI 146 whenever EQUIs 36 and 100 operate, and maintain EQUI 146 at all times that any emissions are vented to EQUI 146. The Permittee must document periods of non-operation of the control equipment EQUI 146 whenever EQUIs 36 and 100 are operating. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 146 | 18510 | If the Permittee replaces EQUI 146, the replacement unit must comply with all requirements of EQUI 146. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.

If no amendment is needed for the replacement, the Permittee shall submit a written notification. The notification must be received by the Agency seven working days prior to the commencement/start of replacement. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |

| SI Id | Sequence | Requirement |
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| EQUI 146 | 18520 | <p>Visible Emissions: The Permittee shall check the fabric filter stack STRU 4 for any visible emissions once each day of operation during daylight hours. If there are visible emissions, the emissions shall be considered uncontrolled until there are no longer visible emissions. The period of time for which there are visible emissions shall be reported as a deviation.</p> <p>During inclement weather, the Permittee shall read and record the pressure drop across the fabric filter, once each day of operation. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 146 | 18540 | <p>Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 146 | 18550 | <p>Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur:</p> <ul style="list-style-type: none"> - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. <p>Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]</p> |
| EQUI 146 | 18560 | <p>Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]</p> |
| EQUI 146 | 18565 | <p>The Permittee shall calibrate or replace the pressure drop monitor at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]</p> |
| EQUI 146 | 18570 | <p>Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]</p> |
| EQUI 146 | 19640 | <p>The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]</p> |
| EQUI 147 | 17610 | <p>Pressure Drop ≥ 0.50 and ≤ 8.0 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change.</p> <p>If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. The Permittee shall record the pressure drop at least once every 24 hours when in operation. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 147 | 17615 | <p>The Permittee must vent emissions from EQUIs 64 and 101 to EQUI 147 whenever EQUIs 64 and 101 operate, and maintain EQUI 147 at all times that any emissions are vented to EQUI 147. The Permittee must document periods of non-operation of the control equipment EQUI 147 whenever EQUIs 64 and 101 are operating. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |

| SI Id | Sequence | Requirement |
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| EQUI 147 | 18510 | <p>If the Permittee replaces EQUI 147, the replacement unit must comply with all requirements of EQUI 147. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.</p> <p>If no amendment is needed for the replacement, the Permittee shall submit a written notification. The notification must be received by the Agency seven working days prior to the commencement/start of replacement. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 147 | 18520 | <p>Visible Emissions: The Permittee shall check the fabric filter stack STRU 6 for any visible emissions once each day of operation during daylight hours. If there are visible emissions, the emissions shall be considered uncontrolled until there are no longer visible emissions. The period of time for which there are visible emissions shall be reported as a deviation.</p> <p>During inclement weather, the Permittee shall read and record the pressure drop across the fabric filter, once each day of operation. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 147 | 18540 | <p>Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 147 | 18550 | <p>Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur:</p> <ul style="list-style-type: none"> - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. <p>Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]</p> |
| EQUI 147 | 18560 | <p>Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]</p> |
| EQUI 147 | 18565 | <p>The Permittee shall calibrate or replace the pressure drop monitor at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]</p> |
| EQUI 147 | 18570 | <p>Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]</p> |
| EQUI 147 | 19640 | <p>The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]</p> |
| EQUI 148 | 17610 | <p>Pressure Drop ≥ 1.50 and ≤ 10.0 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change.</p> <p>If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. The Permittee shall record the pressure drop at least once every 24 hours when in operation. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |

| SI Id | Sequence | Requirement |
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| EQUI 148 | 17615 | The Permittee must vent emissions from EQUIs 74, 126, and 127 to EQUI 148 whenever EQUIs 74, 126, and 127 operate, and maintain EQUI 148 at all times that any emissions are vented to EQUI 148. The Permittee must document periods of non-operation of the control equipment EQUI 148 whenever EQUIs 74, 126, and 127 are operating. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 148 | 18510 | <p>If the Permittee replaces EQUI 148, the replacement unit must comply with all requirements of EQUI 148. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.</p> <p>If no amendment is needed for the replacement, the Permittee shall submit a written notification. The notification must be received by the Agency seven working days prior to the commencement/start of replacement. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 148 | 18520 | <p>Visible Emissions: The Permittee shall check the fabric filter stack STRU 9 for any visible emissions once each day of operation during daylight hours. If there are visible emissions, the emissions shall be considered uncontrolled until there are no longer visible emissions. The period of time for which there are visible emissions shall be reported as a deviation.</p> <p>During inclement weather, the Permittee shall read and record the pressure drop across the fabric filter, once each day of operation. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 148 | 18540 | Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 148 | 18550 | <p>Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur:</p> <ul style="list-style-type: none"> - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. <p>Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]</p> |
| EQUI 148 | 18560 | Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4] |
| EQUI 148 | 18565 | The Permittee shall calibrate or replace the pressure drop monitor at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5] |
| EQUI 148 | 18570 | Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5] |
| EQUI 148 | 19640 | The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14] |

| SI Id | Sequence | Requirement |
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| EQUI 149 | 17610 | <p>Pressure Drop ≥ 1.50 and ≤ 8.0 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change.</p> <p>If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. The Permittee shall record the pressure drop at least once every 24 hours when in operation. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 149 | 17615 | <p>The Permittee must vent emissions from EQUIs 41 and 42 to EQUI 149 whenever EQUIs 41 and 42 operate, and maintain EQUI 149 at all times that any emissions are vented to EQUI 149. The Permittee must document periods of non-operation of the control equipment EQUI 149 whenever EQUIs 41 and 42 are operating. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 149 | 18510 | <p>If the Permittee replaces EQUI 149, the replacement unit must comply with all requirements of EQUI 149. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.</p> <p>If no amendment is needed for the replacement, the Permittee shall submit a written notification. The notification must be received by the Agency seven working days prior to the commencement/start of replacement. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 149 | 18520 | <p>Visible Emissions: The Permittee shall check the fabric filter stack STRU 10 for any visible emissions once each day of operation during daylight hours. If there are visible emissions, the emissions shall be considered uncontrolled until there are no longer visible emissions. The period of time for which there are visible emissions shall be reported as a deviation.</p> <p>During inclement weather, the Permittee shall read and record the pressure drop across the fabric filter, once each day of operation. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 149 | 18540 | <p>Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 149 | 18550 | <p>Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur:</p> <ul style="list-style-type: none"> - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. <p>Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]</p> |
| EQUI 149 | 18560 | <p>Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]</p> |
| EQUI 149 | 18565 | <p>The Permittee shall calibrate or replace the pressure drop monitor at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]</p> |

| SI Id | Sequence | Requirement |
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| EQUI 149 | 18570 | Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5] |
| EQUI 149 | 19640 | The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14] |
| EQUI 150 | 17610 | Pressure Drop ≥ 1.50 and ≤ 10.0 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change.

If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. The Permittee shall record the pressure drop at least once every 24 hours when in operation. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 150 | 17615 | The Permittee must vent emissions from EQUIs 11, 18, 31, 75 and 76 to EQUI 150 whenever EQUIs 11, 18, 31, 75 and 76 operate, and maintain EQUI 150 at all times that any emissions are vented to EQUI 150. The Permittee must document periods of non-operation of the control equipment EQUI 150 whenever EQUIs 11, 18, 31, 75 and 76 are operating. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 150 | 18510 | If the Permittee replaces EQUI 150, the replacement unit must comply with all requirements of EQUI 150. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.

If no amendment is needed for the replacement, the Permittee shall submit a written notification. The notification must be received by the Agency seven working days prior to the commencement/start of replacement. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 150 | 18520 | Visible Emissions: The Permittee shall check the fabric filter stack STRU 12 for any visible emissions once each day of operation during daylight hours. If there are visible emissions, the emissions shall be considered uncontrolled until there are no longer visible emissions. The period of time for which there are visible emissions shall be reported as a deviation.

During inclement weather, the Permittee shall read and record the pressure drop across the fabric filter, once each day of operation. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 150 | 18540 | Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 150 | 18550 | Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur:
- visible emissions are observed;
- the recorded pressure drop is outside the required operating range; or
- the fabric filter or any of its components are found during the inspections to need repair.
Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5] |

| SI Id | Sequence | Requirement |
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| EQUI 150 | 18560 | Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4] |
| EQUI 150 | 18565 | The Permittee shall calibrate or replace the pressure drop monitor at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5] |
| EQUI 150 | 18570 | Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5] |
| EQUI 150 | 19640 | The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14] |
| EQUI 151 | 17610 | Pressure Drop ≥ 0.50 and ≤ 8.0 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change.

If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. The Permittee shall record the pressure drop at least once every 24 hours when in operation. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 151 | 17615 | The Permittee must vent emissions from EQUIs 77 and 101 to EQUI 151 whenever EQUIs 77 and 101 operate, and maintain EQUI 151 at all times that any emissions are vented to EQUI 151. The Permittee must document periods of non-operation of the control equipment EQUI 151 whenever EQUIs 77 and 101 are operating. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 151 | 18510 | If the Permittee replaces EQUI 151, the replacement unit must comply with all requirements of EQUI 151. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.

If no amendment is needed for the replacement, the Permittee shall submit a written notification. The notification must be received by the Agency seven working days prior to the commencement/start of replacement. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 151 | 18520 | Visible Emissions: The Permittee shall check the fabric filter stack STRU 13 for any visible emissions once each day of operation during daylight hours. If there are visible emissions, the emissions shall be considered uncontrolled until there are no longer visible emissions. The period of time for which there are visible emissions shall be reported as a deviation.

During inclement weather, the Permittee shall read and record the pressure drop across the fabric filter, once each day of operation. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 151 | 18540 | Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |

| SI Id | Sequence | Requirement |
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| EQUI 151 | 18550 | <p>Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur:</p> <ul style="list-style-type: none"> - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. <p>Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]</p> |
| EQUI 151 | 18560 | <p>Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]</p> |
| EQUI 151 | 18565 | <p>The Permittee shall calibrate or replace the pressure drop monitor at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]</p> |
| EQUI 151 | 18570 | <p>Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]</p> |
| EQUI 151 | 19640 | <p>The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]</p> |
| EQUI 152 | 17610 | <p>Pressure Drop ≥ 0.50 and ≤ 8.0 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change.</p> <p>If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. The Permittee shall record the pressure drop at least once every 24 hours when in operation. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 152 | 17615 | <p>The Permittee must vent emissions from EQUIs 30, 48, 50, 71, 72, 98, 99, 106, and 160 to EQUI 152 whenever EQUIs 30, 48, 50, 71, 72, 98, 99, 106, and 160 operate, and maintain EQUI 152 at all times that any emissions are vented to EQUI 152. The Permittee must document periods of non-operation of the control equipment EQUI 152 whenever EQUIs 30, 48, 50, 71, 72, 98, 99, 106, and 160 are operating. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 152 | 18510 | <p>If the Permittee replaces EQUI 152, the replacement unit must comply with all requirements of EQUI 152. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.</p> <p>If no amendment is needed for the replacement, the Permittee shall submit a written notification. The notification must be received by the Agency seven working days prior to the commencement/start of replacement. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |

| SI Id | Sequence | Requirement |
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| EQUI 152 | 18520 | <p>Visible Emissions: The Permittee shall check the fabric filter stack STRU 14 for any visible emissions once each day of operation during daylight hours. If there are visible emissions, the emissions shall be considered uncontrolled until there are no longer visible emissions. The period of time for which there are visible emissions shall be reported as a deviation.</p> <p>During inclement weather, the Permittee shall read and record the pressure drop across the fabric filter, once each day of operation. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 152 | 18540 | <p>Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 152 | 18550 | <p>Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur:</p> <ul style="list-style-type: none"> - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. <p>Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]</p> |
| EQUI 152 | 18560 | <p>Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]</p> |
| EQUI 152 | 18565 | <p>The Permittee shall calibrate or replace the pressure drop monitor at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]</p> |
| EQUI 152 | 18570 | <p>Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]</p> |
| EQUI 152 | 19640 | <p>The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]</p> |
| EQUI 153 | 17610 | <p>Pressure Drop ≥ 1.50 and ≤ 10.0 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change.</p> <p>If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. The Permittee shall record the pressure drop at least once every 24 hours when in operation. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 153 | 17615 | <p>The Permittee must vent emissions from EQUIs 3, 4, 5, 6, 7, 10, 86, 90, 95, and 104 to EQUI 153 whenever EQUIs 3, 4, 5, 6, 7, 10, 86, 90, 95, and 104 operate, and maintain EQUI 153 at all times that any emissions are vented to EQUI 153. The Permittee must document periods of non-operation of the control equipment EQUI 153 whenever EQUIs 3, 4, 5, 6, 7, 10, 86, 90, 95, and 104 are operating. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |

| SI Id | Sequence | Requirement |
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| EQUI 153 | 18510 | <p>If the Permittee replaces EQUI 153, the replacement unit must comply with all requirements of EQUI 153. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.</p> <p>If no amendment is needed for the replacement, the Permittee shall submit a written notification. The notification must be received by the Agency seven working days prior to the commencement/start of replacement. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 153 | 18520 | <p>Visible Emissions: The Permittee shall check the fabric filter stack STRU 16 for any visible emissions once each day of operation during daylight hours. If there are visible emissions, the emissions shall be considered uncontrolled until there are no longer visible emissions. The period of time for which there are visible emissions shall be reported as a deviation.</p> <p>During inclement weather, the Permittee shall read and record the pressure drop across the fabric filter, once each day of operation. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 153 | 18540 | <p>Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 153 | 18550 | <p>Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur:</p> <ul style="list-style-type: none"> - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. <p>Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]</p> |
| EQUI 153 | 18560 | <p>Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]</p> |
| EQUI 153 | 18565 | <p>The Permittee shall calibrate or replace the pressure drop monitor at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]</p> |
| EQUI 153 | 18570 | <p>Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]</p> |
| EQUI 153 | 19640 | <p>The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]</p> |
| EQUI 154 | 17610 | <p>Pressure Drop ≥ 0.50 and ≤ 8.0 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change.</p> <p>If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. The Permittee shall record the pressure drop at least once every 24 hours when in operation. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |

| SI Id | Sequence | Requirement |
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| EQUI 154 | 17615 | The Permittee must vent emissions from EQUIs 7, 8, 9, 12, 13, 14, 15, 24, 25, 26, 60, 61, 92, 94, 95, 102, 105, 107, and 110 to EQUI 154 whenever EQUIs 7, 8, 9, 12, 13, 14, 15, 24, 25, 26, 60, 61, 92, 94, 95, 102, 105, 107, and 110 operate, and maintain EQUI 154 at all times that any emissions are vented to EQUI 154. The Permittee must document periods of non-operation of the control equipment EQUI 154 whenever EQUIs 7, 8, 9, 12, 13, 14, 15, 24, 25, 26, 60, 61, 92, 94, 95, 102, 105, 107, and 110 are operating. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 154 | 18510 | <p>If the Permittee replaces EQUI 154, the replacement unit must comply with all requirements of EQUI 154. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.</p> <p>If no amendment is needed for the replacement, the Permittee shall submit a written notification. The notification must be received by the Agency seven working days prior to the commencement/start of replacement. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 154 | 18520 | <p>Visible Emissions: The Permittee shall check the fabric filter stack STRU 17 for any visible emissions once each day of operation during daylight hours. If there are visible emissions, the emissions shall be considered uncontrolled until there are no longer visible emissions. The period of time for which there are visible emissions shall be reported as a deviation.</p> <p>During inclement weather, the Permittee shall read and record the pressure drop across the fabric filter, once each day of operation. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 154 | 18540 | Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 154 | 18550 | <p>Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur:</p> <ul style="list-style-type: none"> - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. <p>Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]</p> |
| EQUI 154 | 18560 | Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4] |
| EQUI 154 | 18565 | The Permittee shall calibrate or replace the pressure drop monitor at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5] |
| EQUI 154 | 18570 | Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5] |
| EQUI 154 | 19640 | The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14] |

| SI Id | Sequence | Requirement |
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| EQUI 155 | 17610 | <p>Pressure Drop ≥ 1.50 and ≤ 8.0 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change.</p> <p>If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. The Permittee shall record the pressure drop at least once every 24 hours when in operation. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 155 | 17615 | <p>The Permittee must vent emissions from EQUIs 7 and 90 to EQUI 155 whenever EQUIs 7 and 90 operate, and maintain EQUI 155 at all times that any emissions are vented to EQUI 155. The Permittee must document periods of non-operation of the control equipment EQUI 155 whenever EQUIs 7 and 90 are operating. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 155 | 18510 | <p>If the Permittee replaces EQUI 155, the replacement unit must comply with all requirements of EQUI 155. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.</p> <p>If no amendment is needed for the replacement, the Permittee shall submit a written notification. The notification must be received by the Agency seven working days prior to the commencement/start of replacement. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 155 | 18520 | <p>Visible Emissions: The Permittee shall check the fabric filter stack STRU 18 for any visible emissions once each day of operation during daylight hours. If there are visible emissions, the emissions shall be considered uncontrolled until there are no longer visible emissions. The period of time for which there are visible emissions shall be reported as a deviation.</p> <p>During inclement weather, the Permittee shall read and record the pressure drop across the fabric filter, once each day of operation. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 155 | 18540 | <p>Recordkeeping of Visible Emissions and Pressure Drop: The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 155 | 18550 | <p>Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur:</p> <ul style="list-style-type: none"> - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. <p>Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]</p> |
| EQUI 155 | 18560 | <p>Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]</p> |
| EQUI 155 | 18565 | <p>The Permittee shall calibrate or replace the pressure drop monitor at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]</p> |

| SI Id | Sequence | Requirement |
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| EQUI 155 | 18570 | Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5] |
| EQUI 155 | 19640 | The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14] |
| EQUI 156 | 17610 | Pressure Drop ≥ 0.50 and ≤ 10.0 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change.

If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. The Permittee shall record the pressure drop at least once every 24 hours when in operation. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 156 | 17615 | The Permittee must vent emissions from EQUIs 11, 18, 31, 75, and 76 to EQUI 156 whenever EQUIs 11, 18, 31, 75, and 76 operate, and maintain EQUI 156 at all times that any emissions are vented to EQUI 156. The Permittee must document periods of non-operation of the control equipment EQUI 156 whenever EQUIs 11, 18, 31, 75, and 76 are operating. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 156 | 18510 | If the Permittee replaces EQUI 156, the replacement unit must comply with all requirements of EQUI 156. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.

If no amendment is needed for the replacement, the Permittee shall submit a written notification. The notification must be received by the Agency seven working days prior to the commencement/start of replacement. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 156 | 18520 | Visible Emissions: The Permittee shall check the fabric filter stack STRU 23 for any visible emissions once each day of operation during daylight hours. If there are visible emissions, the emissions shall be considered uncontrolled until there are no longer visible emissions. The period of time for which there are visible emissions shall be reported as a deviation.

During inclement weather, the Permittee shall read and record the pressure drop across the fabric filter, once each day of operation. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 156 | 18540 | Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 156 | 18550 | Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur:
- visible emissions are observed;
- the recorded pressure drop is outside the required operating range; or
- the fabric filter or any of its components are found during the inspections to need repair.
Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5] |

| SI Id | Sequence | Requirement |
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| EQUI 156 | 18560 | Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4] |
| EQUI 156 | 18565 | The Permittee shall calibrate or replace the pressure drop monitor at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5] |
| EQUI 156 | 18570 | Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5] |
| EQUI 156 | 19640 | The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14] |
| EQUI 157 | 17610 | Pressure Drop ≥ 0.50 and ≤ 8.0 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change.

If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. The Permittee shall record the pressure drop at least once every 24 hours when in operation. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 157 | 17615 | The Permittee must vent emissions from EQUIs 99, 108, and 109 to EQUI 157 whenever EQUIs 99, 108, and 109 operate, and maintain EQUI 157 at all times that any emissions are vented to EQUI 157. The Permittee must document periods of non-operation of the control equipment EQUI 157 whenever EQUIs 99, 108, and 109 are operating. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 157 | 18510 | If the Permittee replaces EQUI 157, the replacement unit must comply with all requirements of EQUI 157. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.

If no amendment is needed for the replacement, the Permittee shall submit a written notification. The notification must be received by the Agency seven working days prior to the commencement/start of replacement. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 157 | 18520 | Visible Emissions: The Permittee shall check the fabric filter stack STRU 26 for any visible emissions once each day of operation during daylight hours. If there are visible emissions, the emissions shall be considered uncontrolled until there are no longer visible emissions. The period of time for which there are visible emissions shall be reported as a deviation.

During inclement weather, the Permittee shall read and record the pressure drop across the fabric filter, once each day of operation. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 157 | 18540 | Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |

| SI Id | Sequence | Requirement |
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| EQUI 157 | 18550 | <p>Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur:</p> <ul style="list-style-type: none"> - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. <p>Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]</p> |
| EQUI 157 | 18560 | <p>Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4]</p> |
| EQUI 157 | 18565 | <p>The Permittee shall calibrate or replace the pressure drop monitor at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]</p> |
| EQUI 157 | 18570 | <p>Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]</p> |
| EQUI 157 | 19640 | <p>The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]</p> |
| EQUI 158 | 17610 | <p>Pressure Drop ≥ 0.50 and ≤ 8.0 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change.</p> <p>If the recorded pressure drop is outside the required range, the emissions during that time shall be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range shall be reported as a deviation. The Permittee shall record the pressure drop at least once every 24 hours when in operation. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 158 | 17615 | <p>The Permittee must vent emissions from EQUIs 11, 18, 31, 75, 76, and 91 to EQUI 158 whenever EQUIs 11, 18, 31, 75, 76, and 91 operate, and maintain EQUI 158 at all times that any emissions are vented to EQUI 158. The Permittee must document periods of non-operation of the control equipment EQUI 158 whenever EQUIs 11, 18, 31, 75, 76, and 91 are operating. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 158 | 18510 | <p>If the Permittee replaces EQUI 145, the replacement unit must comply with all requirements of EQUI 145. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable.</p> <p>If no amendment is needed for the replacement, the Permittee shall submit a written notification. The notification must be received by the Agency seven working days prior to the commencement/start of replacement. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 158 | 18520 | <p>Visible Emissions: The Permittee shall check the fabric filter stack STRU 27 for any visible emissions once each day of operation during daylight hours. If there are visible emissions, the emissions shall be considered uncontrolled until there are no longer visible emissions. The period of time for which there are visible emissions shall be reported as a deviation.</p> <p>During inclement weather, the Permittee shall read and record the pressure drop across the fabric filter, once each day of operation. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |

| SI Id | Sequence | Requirement |
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| EQUI 158 | 18540 | Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 158 | 18550 | Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur:
- visible emissions are observed;
- the recorded pressure drop is outside the required operating range; or
- the fabric filter or any of its components are found during the inspections to need repair.
Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5] |
| EQUI 158 | 18560 | Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation. [Minn. R. 7007.0800, subp. 4] |
| EQUI 158 | 18565 | The Permittee shall calibrate or replace the pressure drop monitor at least once every 12 months and shall maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5] |
| EQUI 158 | 18570 | Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5] |
| EQUI 158 | 19640 | The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14] |
| EQUI 159 | 3680 | 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)] |
| EQUI 159 | 3690 | Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)] |
| EQUI 159 | 19650 | The Permittee must vent emissions from EQUI 159 to equipment meeting the requirements of EQUI 145 whenever EQUI 159 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200] |
| EQUI 160 | 7240 | The Permittee must limit Opacity <= 7 percent opacity. [40 CFR 60.672(b), 40 CFR pt. 60, subp. 000(Table 3), Minn. R. 7011.3350] |

| SI Id | Sequence | Requirement |
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| EQUI 160 | 7260 | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. OOO as follows:</p> <p>40 CFR 60.670(a);
 40 CFR 60.670(d)-(f);
 40 CFR 60.671;
 40 CFR 60.672(b);
 40 CFR 60.673;
 40 CFR 60.674(b);
 40 CFR 60.675(a)-(c);
 40 CFR 60.675(f);
 40 CFR 60.675(g);
 40 CFR 60.675(i);
 40 CFR 60.676(a)(1)-(a)(3);
 40 CFR 60.676(b)(1);
 40 CFR 60.676(e)-(h);
 40 CFR 60.676(i)(1);
 40 CFR 60.676(j);
 40 CFR 60.676(k);
 40 CFR pt. 60, subp. OOO, Table 1; and
 40 CFR pt. 60, subp. OOO, Table 3.</p> <p>A copy of 40 CFR pt. 60, subp. OOO is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.3350]</p> |
| EQUI 160 | 19650 | <p>The Permittee must vent emissions from EQUI 160 to equipment meeting the requirements of EQUI 152 whenever EQUI 160 operates. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]</p> |
| EQUI 160 | 20045 | <p>Opacity: The Permittee shall conduct a performance test due before 180 days following Permit Issuance Date and every 60 months thereafter to measure opacity.</p> <p>The first test is due by the date specified above and all subsequent tests shall be completed every 60 months thereafter by the due date (month and day) and as described below. The performance test shall be conducted at worst-case conditions defined at Minn. R. 7017.2005, subp. 8 or at the operating conditions described at Minn. R. 7017.2025, subp. 2, using EPA Reference Methods 9, or other method approved by MPCA in the performance test plan approval.</p> <p>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.</p> <p>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. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350, Minn. R. 7017.2020, subp. 1]</p> |

| SI Id | Sequence | Requirement |
|----------|----------|--|
| | | <p>The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows:</p> <p>40 CFR 60.1;
 40 CFR 60.2;
 40 CFR 60.3;
 40 CFR 60.4;
 40 CFR 60.7(a)(3)-(7);
 40 CFR 60.7(b);
 40 CFR 60.8;
 40 CFR 60.9;
 40 CFR 60.10;
 40 CFR 60.11;
 40 CFR 60.12;
 40 CFR 60.13;
 40 CFR 60.14;
 40 CFR 60.15;
 40 CFR 60.16; and
 40 CFR 60.17.</p> <p>A copy of 40 CFR pt. 60, subp. A is included in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, 40 CFR pt. 60, subp. OOO, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7011.3350, Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]</p> |
| EQUI 160 | 35700 | |
| EQUI 160 | 35730 | The Permittee shall submit a notification of anticipated date for conducting opacity observations: Due 30 calendar days before Opacity Observation Date. [40 CFR 60.7(a)(6), Minn. R. 7019.0100, subp. 1] |
| FUGI 45 | 1 | The Permittee must limit Process Throughput <= 1000.0 tons per day 24-hour block average. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| FUGI 45 | 6440 | Process Throughput: Daily Recordkeeping. On each day of operation the Permittee must calculate, record, and maintain a record of the total quantity material throughput. This must be recorded in usage logs. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7007.0800, subps. 4-5, Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| FUGI 47 | 1 | The Permittee must not operate FUGI 47 during the months of December, January, and February. The Permittee shall certify that FUGI 47 did not operate during these months on form CR-04 (Annual Compliance Certification Report). [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| FUGI 87 | 1 | The Permittee must not operate FUGI 87 during the months of December, January, and February. The Permittee shall certify that FUGI 87 did not operate during these months on form CR-04 (Annual Compliance Certification Report). [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |
| FUGI 88 | 1 | The Permittee must not operate FUGI 88 during the months of December, January, and February. The Permittee shall certify that FUGI 88 did not operate during these months on form CR-04 (Annual Compliance Certification Report). [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)] |

Attachment 3 - Modeling Report

Air Quality Dispersion Modeling (AQDM) report form

Doc Type: Air Dispersion Modeling

Acronym list on page 7.

Instructions for permit applicants: For air dispersion modeling conducted to support a permit amendment, a copy of the completed Air Quality Dispersion Modeling report form (AQDM-06) and all accompanying electronic files must be included in each required copy of the permit application. Follow the instructions for submitting the permit application located at <https://www.pca.state.mn.us/business-with-us/air-permit-application-forms>.

Instructions for other modeling submittals: For air dispersion modeling conducted for a permit or compliance requirement or special project that doesn't require a permit amendment, submit a "pdf" copy of the Air Quality Dispersion Modeling report form (AQDM-06) and accompanying modeling files on electronic media, such as a compact disc (CD) or USB drive, to:

Air Quality Permit Document Coordinator
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

Is this Modeling Report in support of a Permit Application: ☐ Yes ☒ No**Facility information**Tempo AI ID number: 65 AQ facility/permit ID number: 13900044 Today's date: 11/06/2025
(mm/dd/yyyy)Facility name: Superior Minerals Co.Facility street address: 12051 Yosemite Ave SCity: Savage County: Scott Zip code: 55378 State: MNFacility contact: Ray Rummel Report prepared by: Kathryn AndersonFacility contact phone: 219-292-5206 Preparer phone: 651-294-4593Facility contact email address: raymond.rummel@carmeuse.com Preparer email address: kathryn.anderson@stantec.com*UTM coordinates of facility (NAD83, zone 15 extended **only**): x = 472,157.37 m East, y = 4,958,939.58 m North

*This should be the central location of the facility/source.

These results are associated with (check all that apply):

- ☐ AERA or Dispersion/Deposition modeling for air toxics
- ☐ Environmental assessment worksheet
- ☐ Environmental impact statement
- ☐ Modeling information request
- ☐ Modeling Impacts from animal feedlots
- ☐ Siting an air monitoring station
- ☐ Siting a meteorological station
- ☒ Permit condition
- ☐ Permit modification
- ☐ Prevention of significant deterioration
- ☐ Screening modeling
- ☐ Special project
- ☐ State implementation plan

Project description

Superior Minerals submits this modeling report in response to MPCA's modeling protocol conditional approval on July 31, 2025. Please find below responses to MPCA's comments in the conditional approval.

Files to accompany modeling results

Use the checkboxes to indicate the files that are included with the modeling report.

1. AERMOD files:
 - ☒ SIA input (*.inp, *.adi, *.ami)
 - ☒ SIA output (*.out, *.ado, *.amo)
 - ☒ SIA plot (*.plt)
 - ☐ SIA post (*.pst)
 - ☒ CIA input (*.inp, *.adi, *.ami)
 - ☒ CIA output (*.out, *.ado, *.amo)
 - ☒ CIA plot (*.plt)
 - ☐ CIA post (*.pst)
 - ☐ CIA culpability (MAXDCONT) (*.dat, *.txt)
 - ☐ Other (*.emi, *.evi, etc.)
2. AERMET files:
 - ☒ Surface (*.sfc)
 - ☒ Profile (*.pfl)
3. BPIP-PRIME files:
 - ☒ Input (*.bpi, *.pip)
 - ☒ Output (*.bpo)
 - ☒ Summary (*.sum)
4. AERMAP files:
 - ☒ Terrain (*.tif)
 - ☒ Input (*.inp, *.ami)
 - ☒ Output (*.out)
 - ☒ Receptor (*.rou)
 - ☒ Source (*.sou)
5. Background data files:
 - ☐ Background concentrations and supporting calculations (annual, seasonal, monthly, etc.)
 - ☐ Supporting ambient monitoring data
6. Modeling results figures:
 - ☐ Figures (*.jpeg, *.pdf)
 - ☐ GIS maps (*.shp)
7. ☒ AQDM-02 spreadsheet: *(Indicate/highlight changes from approved protocol.)*
8. ☒ Source impact analysis results (AQDM-11)
9. ☐ Hourly O₃ file
10. ☒ General Public Preclusion Plan (GPPP)
11. ☐ AERA forms
12. ☒ Other files and supporting documents:
Fugitive Dust Control Plan

Section 1. Modeling protocol

1. This AQDM report is based on a protocol that has been:

☐ Approved ☒ Conditionally approved *MPCA approval date (mm/dd/yyyy): 07/31/2025

**This is the date given on AQDM-04 form*

2. Does this modeling submittal **completely** follow the approved protocol? ☐ Yes ☒ No

If yes, proceed to Section 3.

If no, proceed to Section 2.

Section 2. Changes to approved/conditionally approved modeling protocol

Table 1: Protocol changes (Please indicate which sections in the approved/conditionally approved protocol have been changed.)

| Modeling protocol by sections | |
|--------------------------------|------------------|
| Section name | Change/No change |
| Modeling purpose | No Change |
| Terrain | Change |
| Buildings | Change |
| Model selection and options | No Change |
| Point sources | Change |
| Volume sources | Change |
| Area sources | Change |
| Area source coordinates | No Change |
| Receptors | Change |
| Meteorological data | No Change |
| Source impact analysis | No Change |
| Background values | Change |
| Nearby sources | No Change |
| Pollutant based considerations | No Change |
| Attachments | Change |
| AERA forms | No Change |

Section 2.1: Detailed changes to modeling protocol

Please provide specific information corresponding to the sections in Table 1 where changes are indicated. If you consulted with the MPCA regarding these proposed changes, document the date of the consultation.

Modeling purpose

MPCA consultation: ☐ Yes ☐ No Date (mm/dd/yyyy): _____

Describe changes:

Terrain

MPCA consultation: ☐ Yes ☒ No Date (mm/dd/yyyy): _____

Describe changes:

The AERMAP files have been updated to include FUGI53A, FUGI53B, FUGI53C, FUGI54, and FUGI55, which were inadvertently omitted from previous modeling. The source IDs have been updated to match the AQDM-02.

Buildings

MPCA consultation: ☐ Yes ☒ No Date (mm/dd/yyyy): _____

Describe changes:

The BPIP files have been updated to exclude nearby sources that are not being modeled.

Model selection and options

MPCA consultation: ☐ Yes ☐ No Date (mm/dd/yyyy): _____

Describe changes:

Point sources

MPCA consultation: ☐ Yes ☒ No Date (mm/dd/yyyy): _____

Describe changes:

The emission rate for STRU14 has been updated. EQUI50 emissions are now allocated to STRU14, not STRU5. STRU5 is now removed. EQUI160 (Bin 34) emissions were added to STRU14.

The emission rate for STRU17 has been updated. EQUI102 emissions were added to STRU17.

The emission rate for STRU18 has been updated. EQUI90 emissions were added to STRU18.

Volume sources

MPCA consultation: ☐ Yes ☒ No Date (mm/dd/yyyy): _____

Describe changes:

Removed Limestone Conveyor 2 (EQUI117) and added Limestone Conveyor 10 (EQUI125). EQUI117 was confirmed to be removed from the facility, EQUI116 now drops directly to EQUI118.

Area sources

MPCA consultation: ☐ Yes ☒ No Date (mm/dd/yyyy): _____

Describe changes:

Per Jake Timler's comment, the emission factor for the storage pile wind erosion (FUGI46A and FUGI46B) was updated as described in AP-42 FIRE 30502507.

Added FUGI53A, FUGI53B, FUGI53C, FUGI54, and FUGI55, which were inadvertently omitted from previous modeling. The Pet Coke Paved Road (FUGI53A-FUGI53C) and Pet Coke Loader Road (FUGI54) are only utilized when the Pet Coke plant is operational. Therefore, monthly emission scalars have been applied to these sources.

The release heights and initial vertical dimensions for the haul roads (FUGI43A-FUGI43C, FUGI49, FUGI53A-FUGI53C, and FUGI54) were previously calculated using outdated methods that assumed the top of plume height was equivalent to the vehicle height. Following EPA's 2012 Haul Road Workgroup guidance, haul road release heights and initial vertical dimensions were updated to more accurately reflect dispersion from these area sources.

Area source coordinates

MPCA consultation: ☐ Yes ☐ No Date (mm/dd/yyyy): _____

Describe changes:

Receptors

MPCA consultation: ☐ Yes ☒ No Date (mm/dd/yyyy): _____

Describe changes:

Superior Minerals investigated the control measures implemented by Savage Riverport to preclude general public access to its property. On behalf of Superior Minerals, Stantec staff contacted Steve Kucala, the Facility Manager at Savage Riverport, to discuss these measures. There is an existing fence along the southern end of the boundary, while the property boundary also includes river and lake shorelines that are unfenced. However, these shorelines are not accessible to the public due to the topography or enclosure of surrounding facilities. Savage Riverport operates two cameras at the site. The cameras and the site are monitored during operations, and Savage Riverport staff have escorted individuals off the site after being identified by the cameras, demonstrating effective control of the property.

Because of these control measures during facility operations, receptors located on the Savage Riverport property were removed from the analysis, as they are not considered part of ambient air when Superior Minerals and Savage Riverport are both operating. Superior Minerals is already modeling a scenario that includes receptors located on Savage Riverport property and Superior Minerals' sources only. Per Jimmy Schneider's comment, it is deemed "appropriate to remove Savage Riverport's emission contributions to locations within their footprint that precludes public access". Therefore, all receptors within control of Savage

Riverport were removed from the modeling analysis. A figure of the Savage Riverport receptor locations can be found in Attachment 1.

Meteorological data

MPCA consultation: ☐ Yes ☐ No Date (mm/dd/yyyy): _____

Describe changes:

Source impact analysis

MPCA consultation: ☐ Yes ☐ No Date (mm/dd/yyyy): _____

Describe changes:

Background values

MPCA consultation: ☐ Yes ☒ No Date (mm/dd/yyyy): _____

Describe changes:

A background value of 55 µg/m³ was used in the modeling analysis based on data from the Blaine monitor after processing for wildfire smoke, from MPCA's January 13, 2025 modeling protocol comments.

Nearby sources

MPCA consultation: ☐ Yes ☐ No Date (mm/dd/yyyy): _____

Describe changes:

Pollutant-based considerations

MPCA consultation: ☐ Yes ☐ No Date (mm/dd/yyyy): _____

Describe changes:

Attachments

MPCA consultation: ☐ Yes ☒ No Date (mm/dd/yyyy): _____

Describe changes:

The list of parameters that have changed from the protocol is included in Attachment 2. The AQDM-02 spreadsheet in the electronic modeling files includes highlighting of the cells with parameters that have changed since the protocol. The updated fugitive dust control plan is included in Attachment 3 with the revised source ID's to match the changes in Attachment 2.

AERA forms

MPCA consultation: ☐ Yes ☐ No Date (mm/dd/yyyy): _____

Describe changes:

Section 3. Modeling results

Table 2: Pollutants and averaging periods (Check all the boxes for each pollutant and averaging period(s) modeled.)

| Pollutant | Averaging period | Source Impact | Cumulative Impact Analysis | | Increment |
|-----------|------------------|---------------|----------------------------|-------|-----------|
| | | | NAAQS | MAAQS | |

| | | Analysis | | | |
|-------------------|-------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|
| CO | 1-hr | ☐ | ☐ | ☐ | ☐ |
| | 8-hr | ☐ | ☐ | ☐ | ☐ |
| Lead | Rolling 3 mo. Avg | - | ☐ | ☐ | ☐ |
| NO ₂ | 1-hr | ☐ | ☐ | ☐ | - |
| | Annual | ☐ | ☐ | ☐ | ☐ |
| SO ₂ | 1-hr | ☐ | ☐ | ☐ | - |
| | 3-hr | ☐ | ☐ | ☐ | ☐ |
| | 24-hr | ☐ | - | ☐ | ☐ |
| | Annual | ☐ | - | ☐ | ☐ |
| PM ₁₀ | 24-hr | ☒ | ☒ | ☒ | ☐ |
| | Annual | ☐ | - | - | ☐ |
| PM _{2.5} | 24-hr | ☐ | ☐ | ☐ | ☐ |
| | Annual | ☐ | ☐ | ☐ | ☐ |
| Ozone | 8-hr | ☐ | ☐ | ☐ | - |

Table 3: SIA modeling results (Provide the SIA results along with the percent of the SIL.)

| Pollutant | Averaging period | SIL
(ug/m ³) | Total modeled concentration (H1H)
(ug/m ³) | Percent of SIL
(%) |
|-------------------|------------------|-----------------------------|---|-----------------------|
| NO ₂ | 1-hr | 7.52 | | |
| | Annual | 1 | | |
| SO ₂ | 1-hr | 7.86 | | |
| | 3-hr | 25 | | |
| | 24-hr | 5 | | |
| | Annual | 1 | | |
| PM ₁₀ | 24-hr | 5 | 101.50 | 2030% |
| | Annual | 1 | | |
| PM _{2.5} | 24-hr | 1.2 | | |
| | Annual | 0.3 | | |
| CO | 1-hr | 2000 | | |
| | 8-hr | 500 | | |
| Ozone | 8-hr | 1 ppb | ppb | |

Table 4: CIA modeling results (Enter modeling results along with the percent of standard.)

| Pollutant | Averaging period | NAAQS
(ug/m ³) | MAAQS
(ug/m ³) | Total modeled
concentration
(includes background
and nearby sources)
(ug/m ³) | Percent of standard
(%) | |
|-------------------|-------------------|-------------------------------|-------------------------------|---|----------------------------|--------|
| | | | | | NAAQS | MAAQS |
| CO | 1-hr | 40,071.5 | 40,071.5 | | | |
| | 8-hr | 10,304.1 | 10,304.1 | | | |
| Lead | Rolling 3 mo. Avg | 0.15 | 0.15 | | | |
| NO ₂ | 1-hr | 188.0 | 188.0 | | | |
| | Annual | 99.7 | 99.7 | | | |
| SO ₂ | 1-hr | 196.4 | 196.4 | | | |
| | 3-hr | 1309.3 | 1309.3 | | | |
| | 24-hr | 366.6 | 366.6 | | | |
| | Annual | 78.6 | 78.6 | | | |
| PM ₁₀ | 24-hr | 150.0 | 150.0 | 148.65 | 99.10% | 99.10% |
| PM _{2.5} | 24-hr | 35.0 | 35.0 | | | |
| | Annual | 9.0 | 12.0 | | | |
| Ozone | 8-hr | 137.3 | 137 | | | |

Table 5: Increment modeling results (Provide the increment modeling results along with the percent of increment.)

| Pollutant | Averaging period | Class II increment (ug/m ³) | Total modeled concentration (includes other increment sources) (ug/m ³) | Percent of increment (%) |
|-------------------|------------------|---|---|--------------------------|
| NO ₂ | 1-hr | - | - | - |
| | Annual | 25 | | |
| SO ₂ | 1-hr | - | - | - |
| | 3-hr | 512 | | |
| | 24-hr | 91 | | |
| | Annual | 20 | | |
| PM ₁₀ | 24-hr | 30 | | |
| | Annual | 17 | | |
| PM _{2.5} | 24-hr | 9 | | |
| | Annual | 4 | | |

Table 6: Culpability analysis results (If results in Table 4 show a modeled exceedance of the NAAQS/MAAQS, document the results of the culpability analysis here.)

| Pollutant | Averaging period | Exceedance | | Facility Contribution | Nearby Source(s) Contribution |
|-------------------|-------------------|--------------------------|--------------------------|-----------------------|-------------------------------|
| | | NAAQS | MAAQS | | |
| CO | 1-hr | ☐ | ☐ | | |
| | 8-hr | ☐ | ☐ | | |
| Lead | Rolling 3 mo. Avg | ☐ | ☐ | | |
| NO ₂ | 1-hr | ☐ | ☐ | | |
| | Annual | ☐ | ☐ | | |
| SO ₂ | 1-hr | ☐ | ☐ | | |
| | 3-hr | ☐ | ☐ | | |
| | 24-hr | - | ☐ | | |
| | Annual | - | ☐ | | |
| PM ₁₀ | 24-hr | ☐ | ☐ | | |
| PM _{2.5} | 24-hr | ☐ | ☐ | | |
| | Annual | ☐ | ☐ | | |

Section 4. Discussion

Enter any discussion, comments, or relevant findings from the modeling demonstration results provided above. Please note that this document is the administrative record for the modeling demonstration. No other forms or reports should be used to convey the final modeling demonstration results without prior written permission from the MPCA Risk Evaluation and Air Modeling Unit. Attachments may be provided to supplement the Report as needed.

As mentioned above, a model run was conducted that focused on receptors located only on the controlled Savage Riverport property and the sources from Superior Minerals. Tables 7 and 8 are presented below for comparison. Table 7 shows the ambient air results for Superior Minerals and Savage Riverport, excluding the controlled areas of Savage Riverport's property. Table 8 shows the model run results for receptors located on controlled areas of the Savage Riverport property from Superior Minerals' emission sources, demonstrating that Superior Minerals' contribution to these receptors comply with the NAAQS standards.

The following attachments has been provided for the updated submittal:

Attachment 1: Savage Riverport Receptors Figure

Attachment 2: Table of Source Parameter Changes

Attachment 3: Fugitive Dust Control Plan

Section 5. Modeling results figures/maps

Insert a figure or map showing the facility emission sources, receptors, and the location of the modeled maximum concentration(s) for each applicable pollutant, corresponding averaging periods, and operating scenarios.

Table 7: NAAQS Model Results

| Modeled Concentration (ug/m ³) | Background Concentration (ug/m ³) | Total Modeled Concentration (includes background) (ug/m ³) | NAAQS (ug/m ³) | Percent of NAAQS |
|--|---|--|----------------------------|------------------|
| 93.65 | 55 | 148.65 | 150 | 99.10% |

Table 8: Model Results of Superior Minerals Sources and Savage Riverport Receptors (H6H)

| Modeled Concentration (ug/m ³) | Background Concentration (ug/m ³) | Total Modeled Concentration (includes background) (ug/m ³) | NAAQS (ug/m ³) | Percent of NAAQS |
|--|---|--|----------------------------|------------------|
| 82.02 | 55 | 137.02 | 150 | 91.35% |

Acronyms

| | |
|-------------------|---|
| AERA | Air Emissions Risk Analysis |
| AERMAP | AERMOD Terrain Preprocessor |
| AERMET | AERMOD Meteorological Preprocessor |
| AERMOD | AMS/EPA Regulatory Model |
| AI | Agency Interest |
| AQ | Air Quality |
| AQDM | Air Quality Dispersion Modeling |
| BPIP-PRIME | Building Profile Input Program for PRIME |
| CIA | Cumulative Impact Analysis |
| CO | Carbon Monoxide |
| EPA | U.S. Environmental Protection Agency |
| MAAQS | Minnesota State Ambient Air Quality Standard |
| MPCA | Minnesota Pollution Control Agency |
| NAAQS | National Ambient Air Quality Standard |
| NO ₂ | Nitrogen Dioxide |
| Pb | Lead |
| PM ₁₀ | Particulate matter less than 10 µm in diameter |
| PM _{2.5} | Particulate matter less than 2.5 µm in diameter |
| ppb | Parts per billion |
| PRIME | Plume Rise Model Enhancements |
| PSD | Prevention of Significant Deterioration Program |
| REAM | Risk Evaluation and Air Modeling |
| SIA | Source Impact Analysis |
| SIL | Significant Impact Level |
| SO ₂ | Sulfur Dioxide |
| SIP | State Implementation Plan |
| µg/m ³ | Micrograms per cubic meter |
| UTM | Universal Transverse Mercator |

**Air Quality Dispersion Modeling (AQDM)
Source Impact Analysis (SIA) results form**

Air Quality Program

Doc Type: Air Dispersion Modeling

Instructions: The purpose of this form is to document the results of a Source Impact Analysis (SIA), where H1H modeled concentrations are compared to applicable Significant Impact Levels (SIL) to determine if a Cumulative Impact Analysis (CIA) is needed for each pollutant modeled. If an SIA has been conducted for this project, please provide results in Table 1 below. Attach this form as the "SIL Analysis and Results" required attachment in e-Services. In addition, please attach the corresponding model output files as "Additional attachments" within your e-Services submittal.

Note: Refer to the Minnesota Pollution Control Agency's (MPCA) Modeling Practice Manual for more information.

Table 1: Source Impact Analysis (SIA) results for Class II modeling demonstrations

| Pollutant | Averaging time | Modeled concentration (H1H) ($\mu\text{g}/\text{m}^3$) | SIL ($\mu\text{g}/\text{m}^3$) | % of SIL | Number of receptors with impact greater than or equal to SIL | Maximum distance from facility centroid to impact greater than or equal to SIL (if applicable) |
|-------------------------|----------------|--|----------------------------------|----------|--|--|
| SO₂ | 1-hr | | 7.86 | 0.0% | | km |
| | 3-hr | | 25 | 0.0% | | |
| | 24-hr | | 5 | 0.0% | | |
| | Annual | | 1 | 0.0% | | |
| PM₁₀ | 24-hr | 101.50 | 5 | 2030.0% | 2276 | 2.23 km |
| | Annual | | 1 | 0.0% | | |
| PM_{2.5} | 24-hr | | 1.2 | 0.0% | | km |
| | Annual | | 0.2 | 0.0% | | |
| NO₂ | 1-hr | | 7.52 | 0.0% | | km |
| | Annual | | 1 | 0.0% | | |
| CO | 1-hr | | 2000 | 0.0% | | km |
| | 8-hr | | 500 | 0.0% | | |

Additional information:

Attachment 1

Savage Riverport Receptors Figure

Attachment 1: Savage Riverport Receptors Figure



Attachment 2

Table of Source Parameter Changes

Attachment 2: Table of Source Parameter Changes

| Source Type | Source Name | Changes from April 2025 Modeling Protocol | Reason for Change |
|---------------|-------------|---|--|
| Point source | STRU14 | Emission rate | EQUI50 emissions are now allocated to STRU14, not STRU5. STRU5 is now removed. EQUI160 (Bin_34) emissions were added to STRU14. |
| | STRU17 | Emission rate | EQUI102 emissions were added to STRU17. |
| | STRU18 | Emission rate | EQUI90 emissions were added to STRU18. |
| Area source | FUGI46A | Emission factor/rate | Per Jake Timler's comment, the emission factor for the storage pile wind erosion (FUGI46) was updated as described in AP-42 FIRE 30502507. |
| | FUGI46B | | |
| | FUGI43A | Release height and initial vertical dimension | The release height and initial vertical dimensions were previously calculated using outdated methods and were recalculated using EPA's 2012 Haul Road Workgroup guidance. |
| | FUGI43B | | |
| | FUGI43C | | |
| | FUGI49 | | |
| | FUGI53A | Added to model | Sources were inadvertently omitted from previous modeling. Monthly emission scalars have been applied. Release height and initial vertical dimensions were calculated using the method stated above. |
| | FUGI53B | | |
| | FUGI53C | | |
| | FUGI54 | | |
| | FUGI55 | Added to model | Inadvertently omitted from previous modeling. |
| Volume source | EQUI117 | Removed from model | EQUI117 was confirmed to be removed from the facility. |
| | EQUI125 | Added to model | EQUI125 was confirmed to exist at the facility. |

Attachment 4 - Points Calculator

Points Calculator

| | |
|--|--|
| 1) AI ID No.: | 65 |
| 2) Facility Name: | Superior Minerals Co |
| 3) Small business? y/n? | n |
| 4) Air Project Tracking Numbers (including | 3256, 5336, 5415, 6251, 7709, 8024 |
| 5) Date of each Application Received: | 9/15/10, 8/17/15, 12/11/15, 10/30/18, 1/15/25, 4/20/2026 |
| 6) Final Permit No. | 13900044-101 |
| 7) Permit Staff | Tarik Hanafy |

| | |
|--------------|----|
| Total Points | 60 |
|--------------|----|

| Application Type | Air Project Tracking No. | Tempo Activity ID | Qty. | Points | Total Points | Total Additional Cost | Details |
|--|--------------------------|--------------------------|------|--------|--------------|-----------------------|---------|
| Administrative Amendment | 5336, 7709 | IND20150001, IND20250001 | 2 | 1 | 2 | \$ 570.00 | |
| Minor Amendment | 5415, 6251 | IND20150002, IND20180001 | 2 | 4 | 8 | \$ 2,280.00 | |
| Applicability Request | | | | 10 | 0 | \$ - | |
| Moderate Amendment | | | | 15 | 0 | \$ - | |
| Major Amendment | 8024 | IND20260001 | 1 | 25 | 25 | \$ 7,125.00 | |
| Individual State Permit (not reissuance) | | | | 50 | 0 | \$ - | |
| Individual Part 70 Permit (not reissuance) | | | | 75 | 0 | \$ - | |

Additional Points

| | | | | | | | |
|--|------|-------------|---|----|----|-------------|---------------|
| Modeling Review | 3256 | IND20100001 | 1 | 15 | 15 | \$ 4,275.00 | PM10 modeling |
| BACT Review | | | | 15 | 0 | \$ - | |
| LAER Review | | | | 15 | 0 | \$ - | |
| CAIR/Part 75 CEM analysis | | | | 10 | 0 | \$ - | |
| NSPS Review | 5415 | IND20150002 | 1 | 10 | 10 | \$ 2,850.00 | subp. 000 |
| NESHAP Review | | | | 10 | 0 | \$ - | |
| Case-by-case MACT Review | | | | 20 | 0 | \$ - | |
| Netting | | | | 10 | 0 | \$ - | |
| Limits to remain below threshold | | | | 10 | 0 | \$ - | |
| Plantwide Applicability Limit (PAL) | | | | 20 | 0 | \$ - | |
| AERA review | | | | 15 | 0 | \$ - | |
| Variance request under 7000.7000 | | | | 35 | 0 | \$ - | |
| Confidentiality request under 7000.1300 | | | | 2 | 0 | \$ - | |
| EAW review | | | | | | | |
| Part 4410.4300, subparts 18, item A; and 29 | | | | 15 | 0 | \$ - | |
| Part 4410.4300, subparts 8, items A & B; 10, items A to C; 16, items A & D; 17, items A to C & E to G; and 18, items B & C | | | | 35 | 0 | \$ - | |
| Part 4410.4300, subparts 4; 5 items A & B; 13; 15; 16, items B & C; and 17 item D | | | | 70 | 0 | \$ - | |

Add'l Points 25

NOTES:

Total Additional Fee is \$7,125.00

Additional points assessed for PM10 modeling review and NSPS 000 review.