

November 8, 2024

Kristine Murphy Barrick Golden Sunlight Mine 453 U.S. Highway 2 East Whitehall, MT 59759

Sent via email: kristine.murphy@barrick.com

RE: Final Title V Operating Permit #OP1689-02

Dear Kristine Murphy:

DEQ prepared this Final Operating Permit #OP1689-02, for Barrick Golden Sunlight Mine, located in Whitehall, Montana.

This permit must be kept at the facility or a DEQ-approved location.

If you have any questions, contact Emily Hultin, the permit writer, at (406) 444-2049 or by email at emily.hultin@mt.gov.

Sincerely,

Eric Merchant

Permitting Services Section Supervisor

Air Quality Bureau

(406) 444-3626

Emily Hultin

Air Quality Engineering Scientist

Air Quality Bureau

(406) 444-2049

ec: Branch Chief, Air Permitting and Monitoring Branch, US EPA Region VIII 8ARD-PM US EPA Region VIII, Montana Office

Montana Department of Environmental Quality

Air, Energy & Mining Division Air Quality Bureau

AIR QUALITY OPERATING PERMIT #OP1689-02

Issued to: Barrick Golden Sunlight Mine

Section 29, Township 2N, Range 3W, Jefferson County, MT

453 U.S. Hwy 2 East Whitehall, MT 59759

| Final/Effective Date: | 11/08/2024 |
|-----------------------------------|------------|
| Expiration Date: | 06/12/2026 |
| Complete Renewal Application Due: | 12/12/2025 |

| Draft Issue Date: | 05/07/2024 |
|---------------------------|------------|
| Proposed Issue Date: | 07/31/2024 |
| End of EPA 45-day Review: | 09/16/2024 |
| Date of Decision: | 10/08/204 |

Significant Modification Application Received: 06/16/2023 Application Deemed Substantively Complete: 06/16/2023 Application Deemed Administratively Complete: 06/16/2023

AFS Number: 030-043-0002A



Permit Issuance and Appeal Processes: DEQ issues this permit as effective and final on November 8, 2024. This permit must be kept at the facility or a DEQ-approved location (Montana Code Annotated (MCA) Sections 75-2-217 and 218, Administrative Rules of Montana (ARM), ARM Title 17, Chapter 8, Subchapter 12, Operating Permit Program).

OP1689-02 i Date of Decision: 10/08/2024 Effective Date: 11/08/2024

Montana Air Quality Operating Permit Department of Environmental Quality

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Terms not otherwise defined in this permit or in the Definitions and Abbreviations Appendix of this permit have the meaning assigned to them in the referenced regulations.

SECTION I. GENERAL INFORMATION

The following general information is provided pursuant to ARM 17.8.1210(1).

Company Name: Barrick Golden Sunlight Mine, Golden Sunlight Mines Inc.

Mailing Address: 453 U.S. Hwy 2 East

City: Whitehall State: MT Zip: 59759

Plant Location: Section 29 Township 2N, Range 3W, Jefferson County, MT

453 U.S. Hwy 2 East

Responsible Official: Kristine Murphy

Alternate Responsible Official: Charles Buus

Facility Contact Person: Charles Buus

Alternate Facility Contact Person: Aaron Norby

Primary SIC Code: 1041

Nature of Business: Gold Ore Mining

Description of Process: GSM utilizes conventional open pit and underground mining methods involving drilling, blasting, loading and hauling to extract ore. The ore is delivered to the mill crushing area to undergo three stages of crushing followed by wet grinding in rod and ball mills. The crushed ore passes through a leaching process where the ore slurry is contacted with a dilute sodium cyanide solution to obtain the optimum extraction of gold and then sent through a washing circuit. GSM suspended mining and milling operations in the second quarter of 2019 and all applicable compliance demonstrations were halted until further notice.

SECTION II. SUMMARY OF EMISSIONS UNITS

The emissions units regulated by this permit are the following (ARM 17.8.1211):

| Emissions Unit ID | Description | Pollution Control Device/Practice |
|----------------------|---|--------------------------------------|
| EU001 | Carbon Reactivation Kiln | Wet Scrubber #2 followed by |
| | | Carbon Filter |
| EU002 | Electrowinning Cells | None |
| EU003 | Refinery Furnace | Wet Scrubber #3 |
| EU007 | Fine Ore Mill Process including Belt 10 | Water Spray/Bag Filters/Wet |
| | | Scrubber #4 |
| EU008 | Fine Ore Processing Unit (FOP) | Enclosure and High Moisture |
| | | Ore |
| EU009 | Conveyors and Pick-Up Points in the Secondary | Enclosure and High Moisture |
| | Crushing Building | Ore |
| EU010 | Tailings Reprocessing Plant/ Tailings Storage | Water Sprays, Enclosures, and |
| | Facility 1 (TSF1) | High Moisture Ore |
| EU011 | Emergency Engine/Generator (up to 400 | 40 CFR 60, Subpart IIII and/or |
| | horsepower, hp) | 40 CFR 63, Subpart ZZZZ |
| EU012 | Portable Screening Plant | Water Sprays |

SECTION III. PERMIT CONDITIONS

The following requirements and conditions are applicable to the facility or to specific emissions units located at the facility (ARM 17.8.1211, 1212, and 1213).

A. Facility-Wide

| Conditions | Rule Citation | Rule Description | Pollutant/Parameter | Limit |
|------------|---|---|--|--|
| A.1 | ARM 17.8.105 | Testing Requirements | Testing Requirements | |
| A.2 | ARM 17.8.304(1) | Visible Air Contaminants | Opacity | 40% |
| A.3 | ARM 17.8.304(2) | Visible Air Contaminants | Opacity | 20% |
| A.4 | ARM 17.8.308(1) | Particulate Matter, Airborne | Fugitive Opacity | 20% |
| A.5 | ARM 17.8.308(2) | Particulate Matter, Airborne | Reasonable Precautions | |
| A.6 | ARM 17.8.308 | Particulate Matter, Airborne | Reasonable Precaution, Construction | 20% |
| A.7 | ARM 17.8.309 | Particulate Matter, Fuel Burning Equipment | Particulate Matter | E= 0.882 * H-0.1664 or E= 1.026 * H-0.233 |
| A.8 | ARM 17.8.310 | Particulate Matter, Industrial Processes | Particulate Matter | $E=4.10 * P^{0.67} \text{ or}$ $E=55 * P^{0.11} - 40$ |
| A.9 | ARM 17.8.322(4) | Sulfur Oxide Emissions, Sulfur in Fuel | Sulfur in Fuel (liquid or solid fuels) | 1 lb/MMBtu fired |
| A.10 | ARM 17.8.322(5) | Sulfur Oxide Emissions, Sulfur in Fuel | Sulfur in Fuel (gaseous) | 50 gr/100 CF |
| A.11 | ARM 17.8.324(3) | Hydrocarbon Emissions, Petroleum Products | Gasoline Storage Tanks | |
| A.12 | ARM 17.8.324 | Hydrocarbon Emissions, Petroleum Products | 65,000 Gallon Capacity | |
| A.13 | ARM 17.8.324 | Hydrocarbon Emissions, Petroleum Products | Oil-effluent Water Separator | |
| A.14 | ARM 17.8.342 | NESHAPs General Provisions | SSM Plans | Submittal |
| A.15 | ARM 17.8.1211(1)(c) and 40 CFR Part 98 | Greenhouse Gas Reporting | Reporting | |
| A.16 | ARM 17.8.1212 | Reporting Requirements | Prompt Deviation Reporting | |
| A.17 | ARM 17.8.1212 | Reporting Requirements | Compliance Monitoring | |
| A.18 | ARM 17.8.1207 | Reporting Requirements | Annual Certification | |

Conditions

A.1. Pursuant to ARM 17.8.105, any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of DEQ, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct test, emission or ambient, for such periods of time as may be necessary using methods approved by DEQ.

Compliance demonstration frequencies that list "as required by DEQ" refer to ARM 17.8.105. In addition, for such sources, compliance with limits and conditions listing "as required by DEQ" as the frequency, is verified annually using emission factors and engineering calculations by DEQ's compliance inspectors during the annual emission inventory review; in the case of Method 9 tests, compliance is monitored during the regular inspection by the compliance inspector.

- A.2. Pursuant to ARM 17.8.304(1), GSM shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed on or before November 23, 1968, that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.
- A.3. Pursuant to ARM 17.8.304(2), GSM shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.
- A.4. Pursuant to ARM 17.8.308(1), GSM shall not cause or authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control emissions of particulate matter are taken. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.
- A.5. Pursuant to ARM 17.8.308(2), GSM shall not cause or authorize the use of any street, road or parking lot without taking reasonable precautions to control emissions of airborne particulate matter, unless otherwise specified by rule or in this permit.
- A.6. Pursuant to ARM 17.8.308, GSM shall not operate a construction site or demolition project unless reasonable precautions are taken to control emissions of airborne particulate matter. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.
- A.7. Pursuant to ARM 17.8.309, unless otherwise specified by rule or in this permit, GSM shall not cause or authorize particulate matter caused by the combustion of fuel to be discharged from any stack or chimney into the outdoor atmosphere in excess of the maximum allowable emissions of particulate matter for existing fuel burning equipment and new fuel burning equipment calculated using the following equations:

For existing fuel burning equipment (installed before November 23, 1968): $E = 0.882 * H^{-0.1664}$

For new fuel burning equipment (installed on or after November 23, 1968): $E = 1.026 * H^{-0.233}$

Where H is the heat input capacity in million BTU (MMBtu) per hour and E is the maximum allowable particulate emissions rate in pounds per MMBtu.

A.8. Pursuant to ARM 17.8.310, unless otherwise specified by rule or in this permit, GSM shall not cause or authorize particulate matter to be discharged from any operation, process, or activity into the outdoor atmosphere in excess of the maximum hourly allowable emissions of particulate matter calculated using the following equations:

For process weight rates up to 30 tons per hour: $E = 4.10 * P^{0.67}$ For process weight rates in excess of 30 tons per hour: $E = 55.0 * P^{0.11} - 40$

Where E = rate of emissions in pounds per hour and P = process weight rate in tons per hour.

- A.9. Pursuant to ARM 17.8.322(4), GSM shall not burn liquid or solid fuels containing sulfur in excess of 1 pound per million BTU fired, unless otherwise specified by rule or in this permit.
- A.10. Pursuant to ARM 17.8.322(5), GSM shall not burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions, unless otherwise specified by rule or in this permit.
- A.11. Pursuant to ARM 17.8.324(3), GSM shall not load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device or is a pressure tank as described in ARM 17.8.324(1), unless otherwise specified by rule or in this permit.
- A.12. Pursuant to ARM 17.8.324, unless otherwise specified by rule or in this permit, GSM shall not place, store or hold in any stationary tank, reservoir or other container of more than 65,000 gallon capacity any crude oil, gasoline or petroleum distillate having a vapor pressure of 2.5 pounds per square inch absolute or greater under actual storage conditions, unless such tank, reservoir or other container is a pressure tank maintaining working pressure sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere, or is designed and equipped with a vapor loss control device, properly installed, in good working order and in operation.
- A.13. Pursuant to ARM 17.8.324, unless otherwise specified by rule or in this permit, GSM shall not use any compartment of any single or multiple-compartment oil-effluent water separator, which compartment receives effluent water containing 200 gallons a day or more of any petroleum product from any equipment processing, refining, treating, storing or handling kerosene or other petroleum product of equal or greater volatility than kerosene, unless such compartment is equipped with a vapor loss control device, constructed so as to prevent emission of hydrocarbon vapors to the atmosphere, properly installed, in good working order and in operation.
- A.14. Pursuant to ARM 17.8.342 and 40 Code of Federal Regulations (CFR) 63.6, GSM shall submit to DEQ a copy of any startup, shutdown, and malfunction (SSM) plan required under 40 CFR 63.6(e)(3) within 30 days of the effective date of this operating permit (if not previously submitted), within 30 days of the compliance date of any new National Emission Standard for Hazardous Air Pollutants (NESHAPs) or Maximum Achievable Control Technology (MACT) standard, and within 30 days of the revision of any such SSM plan, when applicable. DEQ requests submittal of such plans in electronic form, when possible.

- As of the issuance of OP1689-00, Table 1 of Subpart EEEEEEE did not require an SSM plan but this could change in the future.
- A.15. Pursuant to ARM 17.8.1211(1)(c) and 40 CFR Part 98, GSM shall comply with requirements of 40 CFR Part 98 Mandatory Greenhouse Gas Reporting, as applicable. GSM is not a listed source in any of the tables in 40 CFR Part 98 as of the date of this permit.
- A.16. GSM shall promptly report deviations from permit requirements including those attributable to upset conditions, as upset is defined in the permit. To be considered prompt, deviations shall be reported to DEQ using the schedule and content as described in Section V.E (unless otherwise specified in an applicable requirement) (ARM 17.8.1212).
- A.17. On or before February 15 and August 15 of each year, GSM shall submit to DEQ the compliance monitoring reports required by Section V.D. These reports must contain all information required by Section V.D, as well as the information required by each individual emissions unit. For the reports due by February 15 of each year, GSM may submit a single report, provided that it contains all the information required by Sections V.B & V.D. Per ARM 17.8.1207,

any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12 (including semiannual monitoring reports), shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, "based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete."

A.18. By February 15 of each year, GSM shall submit to DEQ the compliance certification required by Section V.B. The annual certification required by Section V.B must include a statement of compliance based on the information available which identifies any observed, documented or otherwise known instance of noncompliance for each applicable requirement. Per ARM 17.8.1207,

any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12 (including annual certifications), shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, "based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete."

B. EU001: Carbon Reactivation Kiln

| Condition | Pollutant/Parameter | Permit Limit | Compliance I Method | Demonstration Frequency | Reporting Requirements |
|--|---|--|--|--|---------------------------|
| B.1, B.10, B.19, B.27, B.28, B.29, B.30 | Opacity | 20% | Method 9 or Visual Survey | Semiannual Weekly | Semiannual |
| B.2, B.11, B.27, B.28, B.29, B.30 | Particulate Matter | Enclosed Kiln Operation and 0.05 grams/dscm | EPA Method 5, 201 or 201A | Once every 4 years | Semiannual |
| B.3, B.11, B.27, B.28, B.29, B.30 | Particulate Matter | Process Weight Rule | EPA Method 5, 201 or 201A | Initial and then as required by DEQ | Semiannual |
| B.4, B.12, B.12, B.13, B.20, B.21, B.22, B.27, B.28, B.29, B.30 | Mercury | 0.17 lb Mercury/Ton Concentrate Processed (Combined total from EU001, EU002 and EU003) | Method 29 (or approved alternate) and other supporting methods including Method 1 or 1A, Method 2, 2A, 2C, 2D, 2F or Method 2G, Method 3, 3A, or 3B, and Method 4. | Initial test within 180 days of February 17, 2014, then an annual test. | Semiannual |
| B.5, B.14, B.26, B.29, B.30 | Emission Control Equipment | Operation and Maintenance of Emission Control Equipment | Operation and Maintenance of wet scrubber and carbon filter | Whenever attached source is in operation | Semiannual |
| B.6, B.7, B.12, B.14, B.16, B.23, B.24, B.27, B.28, B.29, B.30 | Scrubber Operation | Continuous Monitoring of pressure drop and liquid flowrate | Log | Continuous | Semiannual |
| B.8, B.17, B.25, B.27, B.28, B.29, B.30 | Inlet Temperature to Carbon Filter Monitoring | Inlet Temperature to carbon filter | Log | Continuous | Semiannual |

| Condition | Pollutant/Parameter | Permit | Compliance Demonstration | | Reporting |
|-------------|-----------------------|---------------|--------------------------|---------------|--------------|
| Condition | Tonutant/Tarameter | Limit | Method | Frequency | Requirements |
| B.9, B.18, | Carbon Filter Exhaust | Monitoring | Method 30B | | |
| B.27, B.28, | Monitoring or Carbon | satisfied by | and for the | Continuous | Semiannual |
| B.29, B.30 | Filter Analytical | sampling and | minimum | for sampling | |
| | Testing | analyzing the | time required | and analyzing | |
| | | exhaust | in 30B up to | the exhaust | |
| | | stream for | one week | stream or | |
| | | mercury or | during the | periodic if | |
| | | testing | period of the | testing for | |
| | | carbon for | annual | mercury | |
| | | reactivity. | performance | loading on | |
| | | | test or; | the carbon | |
| | | | Carbon Filter | | |
| | | | Testing using | | |
| | | | Method | | |
| | | | 7471B or | | |
| | | | another | | |
| | | | Method | | |
| | | | approved by | | |
| | | | DEQ | | |

Conditions

- B.1. GSM shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source that exhibit opacity of 20 percent or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- B.2. GSM shall operate the carbon reactivation kiln in a totally enclosed manner and the emissions shall be vented to a wet scrubber (scrubber #2) and not exceed 0.05 grams per dry standard cubic meter (ARM 17.8.749 and ARM 17.8.752).
- B.3. The particulate emissions from process weight shall not exceed the value calculated by $E = 4.10 * P^{0.67}$ for process weight rates up to 30 tons per hour and/or $E = 55.0 * P^{0.11} 40$ for process weight rates in excess of 30 tons per hour, where E is the rate of emissions in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).
- B.4. GSM shall limit mercury emissions from the carbon reactivation kiln scrubber, refinery furnace wet scrubber and electrowinning processes to a combined total of 0.17 lb Mercury/ton of concentrate processed (ARM 17.8.749 and 40 CFR 63, Subpart EEEEEEEE).
- B.5. GSM shall operate a scrubber and carbon filter on the Carbon Reactivation Kiln whenever the carbon reactivation kiln is in operation (ARM 17.8.749 and 40 CFR 63, Subpart EEEEEEEE).

- B.6. GSM shall continuously measure the change in pressure of the gas stream through scrubber #2 (ARM 17.8.749).
- B.7. GSM shall continuously measure the scrubbing liquid flow rate to scrubber #2 (ARM 17.8.749).
- B.8. GSM shall measure the inlet temperature to the carbon filter on the carbon reactivation kiln once per shift (ARM 17.8.749).
- B.9. GSM shall continuously monitor the performance of the carbon reactivation kiln carbon filter through one of the compliance demonstration options in Section III. B.18 (ARM 17.8.749 and 40 CFR 63, Subpart EEEEEEE).

Compliance Demonstration

B.10. GSM shall conduct either a semiannual Method 9 source test or a weekly visual survey of visible emissions for emitting units listed in this section. Under the visual survey option, once per calendar week, during daylight hours, GSM shall visually survey the emitting units listed in this section for any visible emissions. If visible emissions are observed during the visual survey, GSM must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 20% opacity based on the Method 9 source test according to the particular source limit, GSM shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then GSM shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve GSM of the liability for a violation determined using Method 9 (ARM 17.8.101(29)).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then GSM shall perform the Method 9 source tests on the emitting units listed in this section for that reporting period.

Method 9 source tests must be performed in accordance with the Montana Source Test Protocol and Procedures Manual, except that prior notification of the test is not required. Each observation period must be a minimum of 6 minutes unless any one reading is 20% or greater, then the observation period must be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is a shorter period of time (ARM 17.8.1213).

B.11. GSM shall monitor compliance with the particulate emission limitation contained in Sections III. B.2 and III.B.3 by performing an initial EPA Method 201, 201 A or Method 5 test, if appropriate, and then every 4 years thereafter, or as required by DEQ and Section III.A.1. The test methods and procedures shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual. All source tests shall be performed at over 90% of the maximum rated capacity of the source. These tests shall include determination of total mass particulate and particulate matter with an aerodynamic diameter of ten microns or less (PM₁₀). The source tests shall be conducted in accordance with the applicable test

- methods listed in 40 CFR Part 60, General Provisions, Appendix A (Total Particulate), Part 51 Method 201 or 201A (PM10) (ARM 17.8.105, ARM 17.8.106 and ARM 17.8.1213).
- B.12. As required by DEQ and Section III.B.4, GSM shall complete an initial mercury performance test within 180 days of February 17, 2014 according to 40 CFR 63 Subpart EEEEEEE, and then annually thereafter, and for each performance test establish parameters for pressure drop across the wet scrubber and liquid flowrate required to be monitored for Sections III.B.6 and III.B.7 according to 40 CFR 63.11647(h). No two consecutive annual compliance tests may occur less than 3 months apart or more than 15 months apart. After the initial compliance test, subsequent tests all use 12 full months of production data preceding subsequent test (ARM 17.8.749 and 40 CFR 63, Subpart EEEEEEE).
- B.13. GSM shall combine the total mercury from the carbon reactivation kiln scrubber, the refinery furnace scrubber and from the electrowinning cells along with the total tons of concentrate processed to demonstrate compliance with the limit in Section III.B.4 (ARM 17.8.749, 40 CFR 63, Subpart EEEEEEE and ARM 17.8.1213).
- B.14. GSM shall record the time periods of scrubber operation, carbon filter operation and carbon reactivation kiln as required in Section III.B.5 (ARM 17.8.1213).
- B.15. GSM shall install, calibrate, maintain, and operate monitoring devices for the continuous measurement of the change in pressure of the gas stream through scrubber #2 as required in Section III.B.6. Monitoring must be done at least once during each 12-hour shift. These monitoring devices must be certified by the manufacturer to be accurate within ±1 inch of water gauge pressure and must be calibrated on an annual basis in accordance with the manufacturer's instructions. If any daily average is less than the established operating limit, GSM shall take corrective action within 24 hours and if the parameters are not in range within 72 hours, the owners shall report the deviation to DEQ and perform a new compliance test within 40 days (ARM 17.8.1213).
- B.16. GSM shall install, calibrate, maintain and operate monitoring devices for the continuous measurement of the scrubbing liquid flow rate to scrubber #2 as required in Section III.B.7. Monitoring must be done at least once during each 12-hour shift. These monitoring devices must be certified by the manufacturer to be accurate within ±5% of design liquid scrubbing flow rate and must be calibrated on at least an annual basis in accordance with the manufacturer's instructions. If any daily average is less than the established operating limit, GSM shall take corrective action within 24 hours and if the parameters are not in range within 72 hours, the owners shall report the deviation to DEQ and perform a new compliance test within 40 days (ARM 17.8.1213.)
- B.17. GSM shall monitor the inlet temperature to the carbon filter on the carbon reactivation kiln once per shift. If an inlet temperature exceeds the temperature operating limit, GSM must take corrective actions to get the temperature back within the parameter operating limit within 48 hours. If the exceedance persists, within 144 hours of the exceedance, GSM must sample and analyze the exhaust stream from the carbon filter using Method 30B (40 CFR part 60, appendix A-8) and compare to an operating limit (calculated pursuant to Section III.B.18(1) or must conduct carbon sampling pursuant to Section III B(18)(2). If the

concentration measured with Method 30B is below 90 percent of the operating limit or the carbon sampling results are below 90 percent of the carbon loading capacity, GSM may set a new temperature operating limit 10 °F above the previous operating limit or at an alternative level approved by DEQ. If the concentration is above 90 percent of the operating limit or above 90 percent of the carbon loading capacity GSM must change the carbon in the filter within 30 days and report the event to DEQ and reestablish an appropriate maximum temperature limit based on approval of DEQ ARM 17.8.749 and 40 CFR 63, Subpart EEEEEEE).

- B.18. GSM shall continuously monitor the performance of the carbon reactivation kiln carbon filter through one of the compliance demonstration options below (ARM 17.8.749 and 40 CFR 63, Subpart EEEEEEE).
 - (1) Continuously sample and analyze the exhaust stream from the carbon filter for mercury using Method 30B (40 CFR part 60, appendix A-8) for a duration of at least the minimum sampling time specified in Method 30B and up to one week that includes the period of the annual performance test.
 - (a) Establish an upper operating limit for the process as determined using the mercury concentration measurements from the sorbent trap (Method 30B) as calculated from the equation of this section

$$OLC = C_{trap} * (EL/CT)$$

Where:

OLC = mercury concentration operating limit for the carbon filter control device on the process as measured using the sorbent trap, (micrograms per cubic meter);

 C_{trap} = average mercury concentration measured using the sorbent trap during the week that includes the compliance performance test, (micrograms per cubic meter);

EL = emission standard for the affected sources (lb/ton of concentrate);

CT = compliance test results for the affected sources (lb/ton of concentrate).

- (b) Sample and analyze the exhaust stream from the carbon filter for mercury at least monthly using Method 30B (40 CFR part 60, appendix A-8). When the mercury concentration reaches 75 percent of the operating limit, begin weekly sampling and analysis. When the mercury concentration reaches 90 percent of the operating limit, replace the carbon in the carbon filter within 30 days. If mercury concentration exceeds the operating limit, change the carbon in the carbon filter within 30 days and report the deviation to DEQ.
- (2) Conduct an initial sampling of the carbon in the carbon bed for mercury 90 days after the replacement of the carbon. A representative sample must be collected from the inlet of the bed and the exit of the bed and analyzed using SW-846 Method 7471B (incorporated by reference—see 40 CFR 63.14). The depth to which the sampler is inserted must be recorded. The design capacity is established by calculating the average carbon loading from the inlet and outlet measurements. Sampling and

analysis of the carbon bed for mercury must be performed quarterly thereafter. When the carbon loading reaches 50 percent of the design capacity of the carbon, monthly sampling must be performed until 90 percent of the carbon loading capacity is reached. The carbon must be removed and replaced with fresh carbon no later than 30 days after reaching 90 percent of capacity. For carbon designs where there may be multiple carbon columns or beds, a representative sample may be collected from the first and last column or bed instead of the inlet or outlet. If the carbon loading exceeds the design capacity of the carbon, change the carbon within 30 days and report the deviation to DEQ.

Recordkeeping

- B.19. If visual surveys are performed, GSM shall maintain a log to verify that the visual surveys were performed as specified in Section III.B.10. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer's initials if any corrective action is required, the time, date, observer's initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212).
- B.20. GSM shall maintain records of the number of one-hour periods that the kiln operates during each day and for each calendar month (ARM 17.8.1212 and 40 CFR 63 Subpart EEEEEEEE).
- B.21. GSM shall maintain records of the weight of each batch of concentrate for each calendar month (ARM 17.8.1212).
- B.22. GSM shall maintain records of the total mercury from the carbon reactivation kiln scrubber, the refinery furnace scrubber and from the electrowinning cells along with the total tons of concentrate processed as required in Section III.B.13 (ARM 17.8.749, 40 CFR 63, Subpart EEEEEEE and ARM 17.8.1212).
- B.23. GSM shall maintain a log of the differential pressure monitoring and annual calibration required in Section III.B.15 (ARM 17.8.1212).
- B.24. GSM shall maintain a log of the scrubber liquid flow rate monitoring and annual calibration required in Section III.B.16 (ARM 17.8.1212).
- B.25. GSM shall maintain records documenting the inlet temperature to the carbon filter were taken once per shift. Any corrective actions take must also be recorded (ARM 17.8.749 and ARM 17.8.1212).
- B.26. GSM shall maintain records of all inspection and maintenance activities performed on Scrubber #2. All inspection and maintenance records must be available to DEQ for inspection and must be submitted to DEQ upon request (ARM 17.8.1212).
- B.27. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, shall be maintained on site, and shall be submitted to DEQ upon request (ARM 17.8.106 and ARM 17.8.1212).

Reporting

- B.28. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- B.29. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- B.30. The semiannual monitoring report shall provide (ARM 17.8.1212):
 - a. A summary of results of any source testing that was performed during that semiannual period; and
 - b. Details of any deviation occurrences, corrective action and maintenance as required under 40 CFR 63.11648; and
 - c. Any compliance demonstration calculations performed to satisfy conditions in Sections III.B.10 through B.18.
 - d. Summary of (any) record keeping logs required in Sections III.B.19 through B.27.

C. EU002: Electrowinning Cells

| Condition(s) | Pollutant/Parameter | Permit Limit | Compliance I | Reporting | |
|---|---------------------|--|--|---|--------------|
| , , | | | Method | Frequency | Requirements |
| C.1, C.4, C.7, C.11, C.12, C.13 | Opacity | 20% | Method 9 or | As Required by DEQ and Section III.A.1 | Semiannual |
| | | | Visual Survey | Weekly | |
| C.2, C.5, C.8, C.10, C.11, C.12, C.13 | PM | Process Weight Rule | EPA Method 5, 201 or 201A | Once every 4 years | Semiannual |
| C.3, C.6, C.8, C.9, C.10, C.11, C.12, C.13 | Mercury | 0.17 lb Mercury/Ton Concentrate Processed (Combined total from EU001, EU002 and EU003) (Same condition as noted in Section III B.4) | Method 29 and other supporting methods including Method 1 or 1A, Method 2, 2A, 2C, 2D, 2F or Method 2G, Method 3, 3A, or 3B, and Method 4. | Initial test within 180 days of February 17, 2014, then an annual test | Semiannual |

Conditions

- C.1. GSM shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source that exhibit opacity of 20 percent or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- C.2. The particulate emissions from process weight shall not exceed the value calculated by $E = 4.10 * P^{0.67}$ for process weight rates up to 30 tons per hour and/or $E = 55.0 * P^{0.11} 40$ for process weight rates in excess of 30 tons per hour, where E is the rate of emissions in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).
- C.3. GSM shall limit mercury emissions from the carbon reactivation kiln scrubber, refinery furnace wet scrubber and electrowinning processes to a combined total of 0.17 lb Mercury/ton of concentrate processed (ARM 17.8.749 and 40 CFR 63, Subpart EEEEEEE).

Compliance Demonstration

C.4. GSM shall conduct either a semiannual Method 9 source test or a weekly visual survey of visible emissions for emitting units listed in this section. Under the visual survey option, once per calendar week, during daylight hours, GSM shall visually survey the emitting units listed in this section for any visible emissions. If visible emissions are observed during the

visual survey, GSM must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 20% opacity based on the Method 9 source test according to the particular source limit, GSM shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then GSM shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve GSM of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then GSM shall perform the Method 9 source tests on the emitting units listed in this section for that reporting period.

Method 9 source tests must be performed in accordance with the Montana Source Test Protocol and Procedures Manual, except that prior notification of the test is not required. Each observation period must be a minimum of 6 minutes unless any one reading is 20% or greater, then the observation period must be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is a shorter period of time (ARM 17.8.1213).

- C.5. GSM shall monitor compliance with the particulate emission limitation contained in Section III. C.2 by performing an initial EPA Method 201, 201 A or Method 5, if appropriate test and then every 4 years thereafter, or another test method approved by DEQ, as required by DEQ and Section III.A.1. The test methods and procedures shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM17.8.106 and ARM 17.8.1213).
- C.6. As required by DEQ and Section III.C.3, GSM shall complete an initial mercury performance test within 180 days of February 17, 2014, according to 40 CFR 63 Subpart EEEEEEE, and then annually thereafter. GSM shall combine the total mercury from the carbon reactivation kiln, the refinery furnace and from the electrowinning cells along with the total tons of concentrate processed to demonstrate compliance with the limit in Section III.B.4 and Section III.C.3. After the initial compliance test, subsequent tests all use 12 full months of production data preceding subsequent test. (ARM 17.8.1213 and 40 CFR 63, Subpart EEEEEEE).

Recordkeeping

- C.7. If visual surveys are performed, GSM shall maintain a log to verify that the visual surveys were performed as specified in Section III.C.4. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer's initials. If any corrective action is required, the time, date, observer's initials, and the details of the corrective action taken must be recorded in the log (ARM 17.8.1212).
- C.8. GSM shall maintain records of the weight of each batch of concentrate for each calendar month and shall also record daily and by calendar month, the number of one-hour periods in which the electrowinning cells operate. (ARM 17.8.1212).

- C.9. GSM shall maintain records of the total mercury from the carbon reactivation kiln scrubber, the refinery furnace scrubber and from the electrowinning cells along with the total tons of concentrate processed as also required in Section III.B.15 (ARM 17.8.749, 40 CFR 63, Subpart EEEEEEE and ARM 17.8.1212).
- C.10. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, shall be maintained on site, and shall be submitted to DEQ upon request (ARM 17.8.106 and ARM 17.8.1212).

Reporting

- C.11. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- C.12. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- C.13. The semiannual monitoring report shall provide (ARM 17.8.1212):
 - a. A summary of results of any source testing that was performed during that semiannual period; and
 - b. Details of any deviation occurrences, corrective action and maintenance as required under 40 CFR 63.11648; and
 - c. Any compliance demonstration calculations performed to satisfy conditions in Sections III.C.1) though C.3

D. EU003: Refinery Furnace

| Condition | Pollutant/Parameter | Permit Limit | Compliance I Method | Demonstration Frequency | Reporting Requirements |
|---|--------------------------------------|---|--|--|------------------------|
| D.1, D.8, D.14, D.22, | Opacity | 20% | Method 9 or | Semiannual | Semiannual |
| D.23, D.24, D.25 | - ry | | Visual Survey | Weekly | |
| D.2, D.9, D.22, D.23, D.24, D.25 | Particulate Matter | Enclosed Refinery Furnace Operation and 0.05 grams/dscm | EPA Method 5, 201 or 201A | Once every 4 years | Semiannual |
| D.3, D.9, D.22, D.23, D.24, D.25 | Particulate Matter | Process Weight Rule | EPA Method 5, 201 or 201A | Initial and then as required by DEQ | Semiannual |
| D.4, D.10, D.15, D.18, D.19, D.22, D.23, D.24, D.25 | Mercury | 0.17 lb Mercury/Ton Concentrate Processed (Combined total from EU001, EU002 and EU003) (Same condition as noted in Section III B.4) | Method 29 (or approved alternate) and other supporting methods including Method 1 or 1A, Method 2, 2A, 2C, 2D, 2F or Method 2G, Method 3, 3A, or 3B, and Method 4. | Initial test within 180 days of February 17, 2014, then an annual test. | Semiannual |
| D.5, D.11, D.20, D.21, D.24, D.25 | Emission Control Equipment | Operation and Maintenance of Emission Control Equipment | Operation and Maintenance of Wet Scrubber | Whenever attached Source is in Operation | Semiannual |
| D.6, D.10, D.12, D.16, D.23, D.24, D.24, D.25 | Scrubber #3 Differential Flowrate | Continuous Monitoring | Log | Continuous | Semiannual |
| D.7, D.10, D.13, D.17, D.23, D.24, D.24, D.25 | Scrubber #3 Liquid Flowrate | Continuous Monitoring | Log | Continuous | Semiannual |

Conditions

- D.1. GSM shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source that exhibit opacity of 20 percent or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- D.2. GSM shall operate the refinery furnace in a totally enclosed manner and the emissions shall be vented to a wet scrubber (scrubber #3) and not exceed 0.05 grams of particulate matter per dry standard cubic meter (PM₁₀) (ARM 17.8.105 and ARM 17.8.749 and ARM 17.8.752).
- D.3. The particulate emissions from process weight shall not exceed the value calculated by $E = 4.10 * P^{0.67}$ for process weight rates up to 30 tons per hour and/or $E = 55.0 * P^{0.11} 40$ for process weight rates in excess of 30 tons per hour, where E is the rate of emissions in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).
- D.4. GSM shall limit mercury emissions from the refinery carbon reactivation kiln wet scrubber, refinery furnace wet scrubber and electrowinning processes to a combined total of 0.17 lb Mercury/ton of concentrate processed (ARM 17.8.749 and 40 CFR 63, Subpart EEEEEEE).
- D.5. GSM shall operate the Refinery Furnace scrubber whenever attached source is in operation (ARM 17.8.749).
- D.6. GSM shall continuously measure the change in pressure of the gas stream through scrubber #3 (ARM 17.8.749).
- D.7. GSM shall continuously measure the scrubbing liquid flow rate to scrubber # 3 (ARM 17.8.749).

Compliance Demonstration

D.8. GSM shall conduct either a semiannual Method 9 source test or a weekly visual survey of visible emissions for emitting units listed in this section. Under the visual survey option, once per calendar week, during daylight hours, GSM shall visually survey the emitting units listed in this section for any visible emissions. If visible emissions are observed during the visual survey, GSM must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 20% opacity based on the Method 9 source test according to the particular source limit, GSM shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then GSM shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve GSM of the liability for a violation determined using Method 9 (ARM 17.8.101(29)).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then GSM shall perform the Method 9 source tests on the emitting units listed in this section for that reporting period.

Method 9 source tests must be performed in accordance with the Montana Source Test Protocol and Procedures Manual, except that prior notification of the test is not required. Each observation period must be a minimum of 6 minutes unless any one reading is 20% or greater, then the observation period must be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is a shorter period of time (ARM 17.8.1213).

- D.9. GSM shall monitor compliance with the particulate emission limitation contained in Sections III. D.2 and III.D.3 by performing an initial EPA Method 201, 201 A or Method 5 test, if appropriate and then 4 years thereafter, as required by DEQ and Section III.A.1. The test methods and procedures shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual. All source tests shall be performed at over 90% of the maximum rated capacity of the refinery furnace. These tests shall include determination of total mass particulate and particulate matter with an aerodynamic diameter of ten microns or less (PM10). The source tests shall be conducted in accordance with the applicable test methods listed in 40 CFR Part 60, General Provisions, Appendix A (Total Particulate), Part 51 Method 201 or 201A (PM10) (17.8.106 and 17.8.1213).
- D.10. As required by DEQ and Section III.D.4, GSM shall complete an initial mercury performance test within 180 days of February 17, 2014, according to 40 CFR 63 Subpart EEEEEEE, and then annually thereafter, and for each performance test establish parameters for pressure drop across the wet scrubber and liquid flowrate according to 40 CFR 63.11647 (h). Existing sources may use a previous emission test for their initial compliance determination in lieu of conducting a new test if the test was conducted within one year of the compliance date using specified methods in 40 CFR 63.11646(a)(1) through (a)(4) and tests were representative of the current operating processes and conditions (ARM 17.8.1213 and 40 CFR 63, Subpart EEEEEEE).
- D.11. GSM shall record the time periods of refinery furnace and scrubber operation (ARM 17.8.1213).
- D.12. GSM shall install, calibrate, maintain, and operate monitoring devices for the continuous measurement of the change in pressure of the gas stream through wet scrubber #3. Monitoring must be done at least once during each 12-hour shift. These monitoring devices must be certified by the manufacturer to be accurate within ±1 inch of water gauge pressure and must be calibrated on an annual basis in accordance with the manufacturer's instructions. If any daily average is less than the established operating limit, GSM shall take corrective action within 24 hours and if the parameters are not in range within 72 hours, the owners shall report the deviation to DEQ and perform a new compliance test within 40 days (ARM 17.8.1213).
- D.13. GSM shall install, calibrate, maintain and operate monitoring devices for the continuous measurement of the scrubbing liquid flow rate to wet scrubber #3. Monitoring must be done at least once during each 12-hour shift. These monitoring devices must be certified by the manufacturer to be accurate within ±5% of design liquid scrubbing flow rate and must

be calibrated on at least an annual basis in accordance with the manufacturer's instructions. If any daily average is less than the established operating limit, GSM shall take corrective action within 24 hours and if the parameters are not in range within 72 hours, the owners shall report the deviation to DEQ and perform a new compliance test within 40 days (ARM 17.8.1213).

Recordkeeping

- D.14. If visual surveys are performed, GSM shall maintain a log to verify that the visual surveys were performed as specified in Section III.D.8. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer's initials if any corrective action is required, the time, date, observer's initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212).
- D.15. GSM shall maintain records of the number of one-hour periods that the furnace operates during each day and for each calendar month (ARM 17.8.1212 and 40 CFR 63 Subpart EEEEEEEE).
- D.16. GSM shall maintain a log of the differential pressure monitoring and annual calibration required in Section III.D.8 (ARM 17.8.1212).
- D.17. GSM shall maintain a log of the scrubber liquid flow rate monitoring and annual calibration required in Section III.D.9 (ARM 17.8.1212).
- D.18. GSM shall maintain records of the weight of each batch of concentrate for each calendar month (ARM 17.8.1212).
- D.19. GSM shall maintain records of the total mercury from the carbon reactivation kiln scrubber, the refinery furnace scrubber and from the electrowinning cells along with the total tons of concentrate processed to demonstrate compliance with the mercury to tons of concentrate limit in Section III.D.4 (ARM 17.8.1212 and 40 CFR 63, Subpart EEEEEEE).
- D.20. GSM shall maintain a record of any hours where the source was operated without scrubber control (ARM 17.8.1212).
- D.21. GSM shall maintain records of all inspection and maintenance activities performed on Scrubber #3. All inspection and maintenance records must be available to DEQ for inspection and must be submitted to DEQ upon request (ARM 17.8.1212).
- D.22. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, shall be maintained on site, and shall be submitted to DEQ upon request (ARM 17.8.106 and ARM 17.8.1212).

Reporting

D.23. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).

- D.24. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- D.25. The semiannual monitoring report shall provide (ARM 17.8.1212):
 - a. A summary of results of any source testing that was performed during that semiannual period; and
 - b. Details of any deviation occurrences, corrective action and maintenance as required under 40 CFR 63.11648; and
 - c. Any compliance demonstration calculations performed to satisfy conditions in Section III.D.1though D.7.
 - d. Summary of (any) record keeping logs required in Sections III.D.14 through D.22.

E. EU007 and EU009-Fine Ore Mill Process & Conveyors and Pick Up Points in the Secondary Crushing Building

| Condition | Pollutant/Parameter | Permit | Compliance I | Reporting | |
|--|--|--|---|---|------------|
| Condition | Pollutant/Parameter | Limit | Method Fi | Requirements | |
| E.1, E.7, E.12, E.17, E.19, E.20 | Opacity | 20% | Method 9 or Visual Survey | Semiannual Weekly | Semiannual |
| E.2, E.8, E.17, E.18, E.19, E.20 | Particulate Matter | Enclosed Operation and 0.05 grams/dscm | EPA Method 5, 201 or 201A | Once every 4 years | Semiannual |
| E.3, E.8, E.17, E.18, E.19, E.20 | Particulate Matter | Process Weight Rule | EPA Method 5 or EPA Method 201 or 201A | Initial and then as required by DEQ | Semiannual |
| E.4, E.9, E.13, E.16, E.19, E.20 | Emission Control Equipment | Operation and Maintenance of Emission Control Equipment | Operation and Maintenance of Wet Scrubber (Note: There are two scrubbers associated with this grouping of emitting units) | Whenever attached Source is in Operation | Semiannual |
| E.5, E.10, E.14, E.19, E.20 | Scrubber Differential Flowrate (Scrubber 4) | Continuous Monitoring | Log | Continuous | Semiannual |

| E.6, E.11, | Scrubber Liquid | Continuous | | | |
|-------------|-----------------------|------------|-----|------------|------------|
| E.15, E.19, | Flowrate (Scrubber 4) | Monitoring | Log | Continuous | Semiannual |
| E.20 | | | | | |

Conditions

- E.1. GSM shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source that exhibit opacity of 20 percent or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- E.2. GSM shall vent the emitting units within this section to Scrubber #4 and not exceed 0.05 grams of particulate matter per dry standard cubic meter) (ARM 17.8.105 and ARM 17.8.749 and ARM 17.8.752).
- E.3. The particulate emissions from process weight shall not exceed the value calculated by $E = 4.10 * P^{0.67}$ for process weight rates up to 30 tons per hour and/or $E = 55.0 * P^{0.11} 40$ for process weight rates in excess of 30 tons per hour, where E is the rate of emissions in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).
- E.4. GSM shall operate Scrubber #4 whenever attached source(s) are in operation (ARM 17.8.749).
- E.5. GSM shall continuously measure the change in pressure of the gas stream through Scrubber #4 (ARM 17.8.749).
- E.6. GSM shall continuously measure the scrubbing liquid flow rate to Scrubber #4 (ARM 17.8.749).

Compliance Demonstration

E.7. GSM shall conduct either a semiannual Method 9 source test or a weekly visual survey of visible emissions on the primary, secondary and tertiary crushers. Under the visual survey option, once per calendar week, during daylight hours, GSM shall visually survey the crushing exhaust for any visible emissions. If visible emissions are observed during the visual survey, GSM must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 20% opacity based on the Method 9 source test according to the particular source limit, GSM shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then GSM shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve GSM of the liability for a violation determined using Method 9.

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then GSM shall perform the Method 9 source tests on the emitting units listed in this section for that reporting period.

Method 9 source tests must be performed in accordance with the Montana Source Test Protocol and Procedures Manual, except that prior notification of the test is not required. Each observation period must be a minimum of 6 minutes unless any one reading is 20% or greater, then the observation period must be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is a shorter period of time (ARM 17.8.101(29) and ARM 17.8.1213).

- E.8. GSM shall test each scrubber at a minimum of once every 4 years. All source tests shall be performed at over 90% of the maximum rated capacity of the source. These tests shall include determination of total mass particulate and particulate matter with an aerodynamic diameter of ten microns or less (PM10). The source tests shall be conducted in accordance with the applicable test methods listed in 40 CFR Part 60, General Provisions, Appendix A) (ARM 17.8.105 and ARM 17.8.749).
- E.9. GSM shall record the time periods of equipment operation and scrubber operation (ARM 17.8.749).
- E.10. GSM shall install, calibrate, maintain, and operate monitoring devices for the continuous measurement of the change in pressure of the gas stream through each wet scrubber. Monitoring must be done at least once during each 12-hour shift. These monitoring devices must be certified by the manufacturer to be accurate within ±1 inch of water gauge pressure and must be calibrated on an annual basis in accordance with the manufacturer's instructions (ARM 17.8.749).
- E.11. GSM shall install, calibrate, maintain and operate monitoring devices for the continuous measurement of the scrubbing liquid flow rate to each wet scrubber. Monitoring must be done at least once during each 12-hour shift. These monitoring devices must be certified by the manufacturer to be accurate within ±5% of design liquid scrubbing flow rate and must be calibrated on at least an annual basis in accordance with the manufacturer's instructions (ARM 17.8.749).

Recordkeeping

- E.12. If visual surveys are performed, GSM shall maintain a log to verify that the visual surveys were performed as specified in Section III.E.7. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer's initials. If any corrective action is required, the time, date, observer's initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212).
- E.13. GSM shall maintain the records where the source was operated without scrubber control (ARM 17.8.1212).
- E.14. GSM shall maintain the records of the differential pressure monitoring and annual calibration required in Section III.E.10 (ARM 17.8.1212).
- E.15. GSM shall maintain the records of the scrubber liquid flow rate monitoring and annual calibration required in Section III.E.11 (ARM 17.8.1212).

- E.16. GSM shall maintain records of all inspection and maintenance activities performed on Scrubber #4. All inspection and maintenance records must be available to DEQ for inspection and must be submitted to DEQ upon request (ARM 17.8.1212).
- E.17. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual and shall be maintained on site (ARM 17.8.106 and ARM 17.8.1212).

Reporting

- E.18. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- E.19. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- E.20. The semiannual monitoring report shall provide (ARM 17.8.1212):
 - a. A summary of the visual surveys or Method 9 source tests performed, and test results logged as specified by Section III.E.7; and
 - b. A summary of the corrective actions taken as specified by Section III.E.12; and
 - c. Any compliance demonstration calculations performed to satisfy conditions in Section III.E.7 though E.11; and
 - d. Summary of (any) record keeping logs required in Sections III.E.12 through E.17.

F. EU008 - Fine Ore Processing Unit (FOP)

| Condition(s) | Pollutant/Parameter | Permit Limit | Compliance Demonstration | | Reporting |
|-----------------|-----------------------|------------------|--------------------------|-------------|--------------|
| | | | Method | Frequency | Requirements |
| F.1, F.6, F.11, | NSPS Requirements | Applicable | Recordkeeping | Ongoing | Semiannual |
| F.16, F.17 | 40 CFR 60, Subpart LL | Requirements | | | Semiannuai |
| F.2, F.14, | Particulate Matter | 0.05 | EPA Method | As Required | |
| F.15, F.16, | | grams/dscm or | 5, 201 or 201A | by DEQ and | |
| F.17 | | 0.022 grains per | | Section | Semiannual |
| | | dry standard | | III.A.1 | Semamuai |
| | | cubic foot | | | |
| | | (gr/dscf) | | | |
| F.3, F.9, F.12, | Opacity | 7% (stack/point | Method 9 or | Semiannual | |
| F.15, F.16, | | source) | | | Semiannual |
| F.17 | | | Visual Surveys | Weekly | |
| F.4, F.10, | Opacity | 10% (fugitive | Method 9 or | Semiannual | |
| F.12, F.15, | | source) | 77. 10 | W/ 11 | Semiannual |
| F.16, F.17 | | | Visual Surveys | Weekly | |
| F.5, F.6, F.7, | FOP Enclosure/Ore | Minimum of | Recordkeeping | Ongoing | Semiannual |
| F.13 | Moisture Content | 6% moisture | or Operational | | |
| | | level | Changes | | |

Conditions

- F.1. GSM shall comply with all applicable requirements of 40 CFR 60, Subpart LL (Standards of Performance for Metallic Mineral Processing Plants) (ARM 17.8.340, ARM 17.8.749, and 40 CFR Part 60, Subpart LL).
- F.2. GSM shall not cause any stack emissions of particulate matter in excess of 0.05 grams per dry standard cubic meter or 0.022 grains per dry standard cubic foot (gr/dscf) (ARM 17.8.749 and 40 CFR 60, Subpart LL).
- F.3. GSM shall not cause or authorize to be discharged into the outdoor atmosphere from any stack/point source that exhibits an opacity of 7% or greater averaged over 6 consecutive minutes (ARM 17.8.749, and 40 CFR 60, Subpart LL).
- F.4. GSM shall not cause or authorize to be discharged into the outdoor atmosphere from any fugitive source that exhibits an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749 and 40 CFR 60, Subpart LL).
- F.5. The FOP unit shall be enclosed within a building or other structure. The ore being handled shall be maintained at a minimum of 6% moisture level prior to processing (ARM 17.8.752).

Compliance Demonstration

F.6. GSM shall comply with all applicable reporting, recordkeeping, and notification requirements of 40 CFR 60, Subpart LL (Standards of Performance for Metallic Mineral Processing Plants) (ARM 17.8.340, ARM 17.8.1213, and 40 CFR Part 60, Subpart LL).

- F.7. GSM shall demonstrate compliance with the enclosure requirement contained in Sections III.F.5 through recordkeeping (ARM 17.8.1212).
- F.8. GSM shall measure the moisture content of the ore being handled each operating day prior to processing. If the moisture content is above 6%, GSM shall adjust operations as necessary (that may include water sprays, etc.) to maintain fugitive PM emissions below the 10% opacity standard (ARM 17.8.1213).
- F.9. GSM shall conduct either a semiannual Method 9 source test or a weekly visual survey of visible emissions on the FOP Unit. Under the visual survey option, once per calendar week, during daylight hours, GSM shall visually survey the FOP Unit for any visible emissions. If visible emissions are observed during the visual survey, GSM must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 7% opacity based on the Method 9 source test, GSM shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then GSM shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve GSM of the liability for a violation determined using Method 9.

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then GSM shall perform the Method 9 source tests on GSM for that reporting period.

Method 9 source tests must be performed in accordance with the Montana Source Test Protocol and Procedures Manual, except that prior notification of the test is not required. Each observation period must be a minimum of 6 minutes unless any one reading is 7% or greater, then the observation period must be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is a shorter period of time (ARM 17.8.101(27), ARM 17.8.1213 and 40 CFR 60 Subpart LL.

F.10. GSM shall conduct either a semiannual Method 9 source test or a weekly visual survey of visible fugitive emissions on equipment associated with the FOP Unit. Under the visual survey option, once per calendar week, during daylight hours, GSM shall visually survey for fugitive emissions for any visible emissions. If visible emissions are observed during the visual survey, GSM must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 10% opacity based on the Method 9 source test, GSM shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then GSM shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve GSM of the liability for a violation determined using Method 9.

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then GSM shall perform the Method 9 source tests on GSM for that reporting period. Method 9 source tests must be performed in accordance with the Montana Source Test Protocol and Procedures Manual, except that prior notification of the test is not required. Each observation period must be a minimum of 6 minutes unless any one reading is 10% or greater, then the observation period must be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is a shorter period of time (ARM 17.8.101(29), ARM 17.8.1213) and 40 CFR 60 Subpart LL.

Recordkeeping

- F.11. GSM shall comply with all applicable recordkeeping and notification requirements of 40 CFR 60, Subpart LL (Standards of Performance for Metallic Mineral Processing Plants) (ARM 17.8.340, ARM 17.8.1212, and 40 CFR Part 60, Subpart LL).
- F.12. If visual surveys are performed, GSM shall maintain a log to verify that the visual surveys were performed as specified in Section III.F.9 and F.10. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer's initials. If any corrective action is required, the time, date, observer's initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212).
- F.13. GSM shall maintain a log documenting any instance when the FOP unit is not enclosed, and the date, time, and duration associated with that instance. GSM shall also maintain a log documenting the ore moisture measurements including date measured. In addition, the log shall include any actions taken for measurements of ore moisture that are below the minimum of 6% (ARM 17.8.1212).
- F.14. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual and shall be maintained on site (ARM 17.8.106 and ARM 17.8.1212).

Reporting

- F.15. All compliance source test reports shall be submitted to DEQ in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- F.16. The annual compliance certification required by Section V.B shall contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- F.17. The semiannual monitoring report shall provide (ARM 17.8.1212):
 - a. a summary of the results of any source testing conducted during the reporting period;
 - b. a summary of the visual surveys or Method 9 source tests performed and test results logged as specified by Section III.F.9 and F.10;

- c. a summary of corrective actions taken as specified in Section III.F.9 and F.10;
- d. a summary of any instance in which the FOP unit was not enclosed and a summary of any ore moisture content less than 6% with actions taken to increase the moisture content as specified in Section IIIF.F.13; and
- e. a summary of recordkeeping kept in accordance with 40 CFR Part 60, Subpart LL, as applicable.
- G. EU010 Tailings Reprocessing Plant/Tailings Storage Facility (TSF1) including Stockpiles (topsoil, overburden, N and S repulping plant feeds, and repulping rejects), Material Transfers, Haul Roads (concentrate and TSF1 trucks), and Concentrate Handling/Loading

| Condition(s) | Pollutant/Parameter | Permit Limit | Compliance Demonstration | | Reporting |
|---------------------------------------|---------------------------------------|---|--|--------------------------|--------------------------|
| | | | Method | Frequency | Requirements |
| G.1, G.5, G.10,G.15, G.16 | 40 CFR 60, Subpart LL | 40 CFR 60, Subpart LL | 40 CFR 60, Subpart LL | 40 CFR 60, Subpart LL | 40 CFR 60, Subpart LL |
| G.6, G.11, | Opacity | 10% (fugitive | Method 9 or | Semiannual | |
| G.12, G.14, G.15, G.16 | | source) | Visual Surveys | Weekly | Semiannual |
| G.2, G.4, G.7, G.10, G.13, G.16 | Fine Ore Reclaim and Conveyor Area | Enclosed within a building or structure | Recordkeeping | Ongoing | Semiannual |
| G.2, G.8, G.9, G.10, G.13, G.16 | Repulped Ore Moisture Content | Ore Moisture Content ≥ 6% | Recordkeeping or Operational Changes | Ongoing | Semiannual |
| G.3, G.7, G.9, G.14, G.16 | TSF1 Throughput | 2,475,000 tons on a dry basis | Recordkeeping | Ongoing | |

Conditions

- G.1. GSM shall comply with all applicable standards, limitations, and the reporting, recordkeeping, and notification requirements of 40 CFR 60, Subpart LL Standards of Performance for Metallic Mineral Process Plants for the repulper plant feed hopper and feed conveyor, filter press discharge, new conveyor and conveyors 5 and 6, and concentrate stockpile (ARM 17.8.340 and 40 CFR 60, Subpart LL).
- G.2. The fine ore reclaim and conveyor area shall be enclosed within a building or other structure. The repulped ore being handled shall be maintained at a minimum of 6% moisture content prior to processing (ARM 17.8.752).
- G.3. GSM shall not process more than 2475,000 tons on a dry basis from the TSF1 on a rolling 12-month basis (ARM 17.8.749).
- G.4. GSM shall maintain a Fugitive Dust Control Plan to DEQ pursuant to MAQP #1689-09 Section II. A. 16. At a minimum this plan shall include all mine areas including tailings

impoundments and roads utilized within the mine permit boundary. The plan should include four elements common with best management practices. 1. Staff titles responsible for carrying out the Fugitive Dust control Plan. 2) Identification of dust control problems. 3) Recommended strategy for resolution. 4) Documentation of corrective action (ARM 17.8.752).

Compliance Demonstration

- G.5. GSM shall comply with all applicable monitoring and compliance provisions of 40 CFR 60, Subpart LL (ARM 17.8.340, and 40 CFR 60, Subpart LL).
- G.6. GSM shall conduct either a semiannual Method 9 source test or a weekly visual survey of visible emissions on the repulper feed hopper and conveyor, filter press discharge, new conveyors and conveyors 5 and 6, and concentrate stockpile. Under the visual survey option, once per calendar week, during daylight hours, GSM shall visually survey the Screening Plant for any visible emissions. If visible emissions are observed during the visual survey, GSM must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 7% opacity based on the Method 9 source test, GSM shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then GSM shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve GSM of the liability for a violation determined using Method 9.

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then GSM shall perform the Method 9 source tests on GSM for that reporting period.

Method 9 source tests must be performed in accordance with the Montana Source Test protocol and Procedures Manual, except that prior notifications of the test is not required. Each observation period must be a minimum of 6 minutes unless any one reading is 7% or greater, then the observation period must be a minimum of 20 minutes or until a violation of the standard has been documented, whichever s a shorter period of time (ARM 17.8.101(29) and Arm 17.8.1213).

- G.7. GSM shall demonstrate compliance with both the enclosure requirement and the TSF1 throughput requirements contained in Sections III. G.2 and G.3 through recordkeeping (ARM 17.8.1212).
- G.8. The repulped ore shall be maintained at a minimum of 6% moisture content using spray bars as well as adjusting the cycle time of the filter press that directly controls the moisture content of the ore. The wet scrubber shall be started if the spray bars and filter press controls do not return the ore moisture content to a minimum of 6% (ARM 17.8.749).
- G.9. GSM shall document, by month, the tons of ore processed (on a dry basis) by the TSF1. By the 25th day of each month, GSM shall total the tons of ore processed by the TSF1 during

the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section III. G.3 (ARM 17.8.749).

Recordkeeping

- G.10. GSM shall comply with all applicable recordkeeping and notification requirements of 40 CFR 60, Subpart LL (ARM 17.8.340 and 40 CFR 60, Subpart LL).
- G.11. If visual surveys are performed, GSM shall maintain a log to verify that the visual surveys were performed as specified in Section III. G.6. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer's initials. If any corrective action is required, the time, date, observer's initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212).
- G.12. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- G.13. GSM shall maintain a log documenting any instance when the Fine Ore Reclaim and Conveyor Araes is not enclosed, and the date, time, and duration associated with that instance. GSM shall also maintain a log documenting the measurement of ore moisture measurements including date. In addition, the log shall include any actions for measurements of ore moisture below 6% (ARM 17.8.1212).

Reporting

- G.14. All compliance source test reports shall be submitted to DEQ in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- G.15. The annual compliance certification required by Section V.B shall contain a certification statement for the above applicable requirements (Arm 17.8.1212).
- G.16. The semiannual monitoring report shall provide (ARM 17.8.1212):
 - a. A summary of the results of any source testing conducted during the reporting period;
 - b. A summary of the visual surveys or Method 9 source test performed and test results logged as specified by Section III. G.6;
 - c. A summary of corrective actions taken as specified in Section III.G.6;
 - d. A summary of any instance in which the fine ore reclaim and conveyor area was not enclosed and a summary of any ore moisture content less than 6% with any actions taken to increase the moisture content as specified in Section III.G.8;
 - e. A summary of the rolling 12-month total of ore processed through the TSF1; and
 - f. A summary of recordkeeping kept in accordance with 40 CFR 60, Subpart LL, as applicable

H. EU011 – Emergency Engine/Generator –up to 400 horsepower

| Condition(s) | Pollutant/Parameter | Permit Limit | Compliance Demonstration | | Reporting |
|----------------|---------------------|--------------|--------------------------|-------------|--------------|
| | | | Method | Frequency | Requirements |
| H.1, H.2, H.3, | 40 CFR 60, Subpart | 40 CFR 60, | 40 CFR 60, | 40 CFR 60, | 40 CFR 60, |
| H.4, H.5, H.6 | IIII | Subpart IIII | Subpart IIII | Subpar IIII | Subpart IIII |
| H.1, H.2, H.3, | 40 CFR 63, Subpart | 40 CFR 63, | 40 CFR 63, | 40 CFR 63, | 40 CFR 63, |
| H.4, H.5, H.6 | ZZZZ | Subpart ZZZZ | Subpart ZZZZ | Subpart | Subpart ZZZZ |
| | | | _ | ZZZZ | |

Conditions

H.1. GSM shall comply with the applicable requirements for the Emergency Engine Generator proposed with the tailings reprocessing operation under 40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines and/or 40 CFR 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. The applicable subpart depends on the constructed date of the selected engine (ARM 17.8.749 and ARM 17.8.752).

Compliance Demonstration

H.2. GSM shall comply with all applicable monitoring and compliance provisions of 40 CFR 60, Subpart IIII and/or 40 CFR 63, Subpart ZZZZ

Recordkeeping

H.3. GSM shall comply with all applicable recordkeeping and notification requirements of 40 CFR 60, Subpart IIII and/or 40 CFR 63, Subpart ZZZZ (ARM 17.8.340, ARM 17.8.342, 40 CFR 60, Subpart IIII, and 40 CFR 63, Subpar ZZZZ).

Reporting

- H.4. All compliance source test reports shall be submitted to DEQ in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- H.5. The annual compliance certification required by Section V.B shall contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- H.6. The semiannual monitoring report shall provide (ARM 178.1212):
 - a. A summary of recordkeeping kept in accordance with 40 CFR 60, Subpart IIII, as applicable; and
 - b. A summary of recordkeeping kept in accordance with 40 CFR 63, Subpart ZZZZ, as applicable

I. EU012 – 300-ton per hour (TPH) Portable Screening Plant

| Condition(s) | Pollutant/Parameter | Permit Limit | Compliance Demonstration | | Reporting |
|----------------|-----------------------|---------------|--------------------------|------------|--------------|
| | | | Method | Frequency | Requirements |
| I.1, I.3, I.5, | 40 CFR 60, Subpart LL | 40 CFR 60, | 40 CFR 60, | 40 CFR 60, | 40 CED (0 |
| I.7, I.8, I.9, | | Subpart LL | Subpart LL | Subpart LL | 40 CFR 60, |
| I.10 | | - | _ | _ | Subpart LL |
| I.1, I.2, I.3, | Opacity | 10% (fugitive | Method 9 or | Semiannual | Semiannual |
| I.4, I.5, I.6, | | source) | Visual Surveys | Weekly | |
| I.7, I.8, I.9, | | | , | , | |
| I.10 | | | | | |

Conditions

- I.1. GSM shall comply with all applicable standards, limitations, and reporting, recordkeeping, and notification requirements of 40 CFR 60, Subpart LL Standards of Performance for Metallic Mineral Processing Plants. GSM shall not cause or authorize to be discharged into the atmosphere from the portable screen or any process fugitive emissions that exhibit greater than 10% opacity average over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart LL).
- I.2. Water and/or chemical dust suppressant shall be available onsite and used, as necessary, to maintain compliance with the opacity limitations for process fugitive emissions in Section III.G.1 (ARM 17.8.752).

Compliance Demonstration

- I.3. GSM shall comply with all applicable monitoring and compliance provisions of 40 CFR 60, Subpart LL (ARM 17.8.340 and 40 CFR 60, Subpart LL).
- 1.4. GSM shall conduct either a semiannual method 9 source test or a weekly visual survey of visible emissions on the Screening Plant. Under the visual survey option, once per calendar week, during daylight hours, GSM shall visually survey the Screening Plant for any visible emissions. If visible emissions are observed during the visual survey, GSM must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 7% opacity based on the Method 9 source test, GSM shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then GSM shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve GSM of the liability for a violation determined using Method 9.

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then GSM shall perform the Method 9 source tests on GSM for that reporting period.

Method 9 source tests must be performed in accordance with the Montana Source Test Protocol and Procedures Manual, except that prior notification of the test is not required. Each observation period must be a minimum of 6 minutes unless one reading is 7% or greater, then the observation period must be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is a shorter period of time (ARM 178.101(29) and ARM 17.8.1213).

Recordkeeping

- I.5. GSM shall comply with all applicable recordkeeping and notification requirements of 40 CFR 60, Subpart LL (ARM 17.8.340 and 40 CFR 60, Subpart LL).
- I.6. If visual surveys are performed, GSM shall maintain a log to verify that the visual surveys were performed as specified in Section III.I.4. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer's initials. If any corrective action is required, the time, date, observer's initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212).
- I.7. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).

Reporting

- I.8. All compliance source test reports shall be submitted to DEQ in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212)
- I.9. The annual compliance certification required by Section V.B shall contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- I.10. The semiannual monitoring report shall provide (ARM 17.8.1212):
 - a. A summary of the results of any source test conducted during the reporting period;
 - b. A summary of the visual surveys or Method 9 source tests performed, and test results logged as specified by Section III.I.6;
 - c. A summary of corrective actions taken as specified in Section III.I.6; and
 - d. A summary of recordkeeping kept in accordance with 40 CFR 60, Subpart LL, as applicable

SECTION IV. NON-APPLICABLE REQUIREMENTS

Air Quality Administrative Rules of Montana (ARM) and Federal Regulations identified as not applicable to the facility or to a specific emissions unit at the time of the permit issuance are listed below (ARM 17.8.1214). The following list does not preclude the need to comply with any new requirements that may become applicable during the permit term.

A. Facility-Wide

The following table contains non-applicable requirements which are administrated by the Air Quality Bureau of Department of Environmental Quality.

| Rule Citation | | Reason |
|----------------------------|---|---|
| State | Federal | |
| ARM 17.8.321, ARM 17.8.610 | | These rules are not applicable because the facility is not listed in the source category cited in the rules. |
| ARM 17.8.320 | | These rules are not applicable because the facility does not have the specific emissions unit cited in the rules. |
| | 40 CFR 60, Subparts C, Ca, Cb 40 CFR 60, Subparts D, Da, Db, Dc 40 CFR 60, Subparts E-J 40 CFR 60, Subparts K, Ka, Kb 40 CFR 60, Subparts L-Z 40 CFR 60, Subparts AA-EE 40 CFR 60, Subparts GG-HH 40 CFR 60, Subparts KK-NN 40 CFR 60, Subparts PP-XX 40 CFR 60, Subparts FFF-LLL 40 CFR 60, Subparts NNN-VVV 40 CFR 60, Subparts KKKK-OOOO 40 CFR 60, Subparts B-F 40 CFR 61, Subparts H-L 40 CFR 61, Subparts N-R | These requirements are not applicable because the facility is not an affected source as defined in these regulations. |

| Rule Citation | | Reason |
|---------------|---|---|
| State | Federal | |
| | 40 CFR 61, Subpart T 40 CFR 61, Subparts V-W 40 CFR 61, Subpart Y 40 CFR 61, Subpart BB 40 CFR 61, Subpart FF | |
| | 40 CFR 63, Subparts F-I 40 CFR 63, Subparts F-I 40 CFR 63, Subparts L-Q 40 CFR 63, Subparts Q-U 40 CFR 63, Subparts W-Y 40 CFR 63, Subparts AA-EE 40 CFR 63, Subparts GG-MM 40 CFR 63, Subparts CCC-EEE 40 CFR 63, Subparts GG-JJJ 40 CFR 63, Subparts TTT-VVV 40 CFR 63, Subparts TTT-VVV 40 CFR 63, Subpart XXX 40 CFR 63, Subpart XXX 40 CFR 63, Subpart AAAA 40 CFR 63, Subpart CCC-KKKK 40 CFR 63, Subpart PPPP-TTTTT 40 CFR 63, Subparts PPPPP-TTTTT 40 CFR 63, Subparts PPPPP-TTTTTT 40 CFR 63, Subparts BBBBB 40 CFR 63, Subparts YYYYY-ZZZZZ 40 CFR 63, Subparts DDDDDD-HHHHHHHH 40 CFR 63, Subparts LLLLL-TTTTTT 40 CFR 63, Subparts LLLLLL-TTTTTT 40 CFR 63, Subparts LLLLLL-TTTTTT 40 CFR 63, Subparts LLLLLL-TTTTTT 40 CFR 63, Subparts LLLLLL-TTTTTTT | These requirements are not applicable because the facility is not an affected source as defined in these regulations. |
| | 40 CFR 63 Subparts FFFFFFF-WWWWWWWW 40 CFR 82, Subparts A-E 40 CFR 82, Subparts G-H | |

B. Emissions Units

The permit application identified applicable requirements: non-applicable requirements for individual or specific emissions units were not listed. DEQ has listed all non-applicable requirements in Section IV.A, these requirements relate to each specific unit, as well as facility wide.

SECTION V. GENERAL PERMIT CONDITIONS

A. Compliance Requirements

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(a)-(c)&(e), §1206(6)(c)&(b)

- 1. The permittee must comply with all conditions of the permit. Any noncompliance with the terms or conditions of the permit constitutes a violation of the Montana Clean Air Act, and may result in enforcement action, permit modification, revocation and reissuance, or termination, or denial of a permit renewal application under ARM Title 17, Chapter 8, Subchapter 12.
- 2. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- 3. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. If appropriate, this factor may be considered as a mitigating factor in assessing a penalty for noncompliance with an applicable requirement if the source demonstrates that both the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations, and that such health, safety or environmental impacts were unforeseeable and could not have otherwise been avoided.
- 4. The permittee shall furnish to DEQ, within a reasonable time set by DEQ (not to be less than 15 days), any information that DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to DEQ copies of those records that are required to be kept pursuant to the terms of the permit. This subsection does not impair or otherwise limit the right of the permittee to assert the confidentiality of the information requested by DEQ, as provided in 75-2-105, MCA.
- 5. Any schedule of compliance for applicable requirements with which the source is not in compliance with at the time of permit issuance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it was based.
- 6. For applicable requirements that will become effective during the permit term, the source shall meet such requirements on a timely basis unless a more detailed plan or schedule is required by the applicable requirement or by DEQ.

B. Certification Requirements

ARM 17.8, Subchapter 12, Operating Permit Program §1207 and §1213(7)(a)&(c)-(d)

1. Any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12, shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, based on information and belief

formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

- Compliance certifications shall be submitted by February 15 of each year, or more frequently if otherwise specified in an applicable requirement or elsewhere in the permit. Each certification must include the required information for the previous calendar year (i.e., January 1 – December 31).
- 3. Compliance certifications shall include the following:
 - a. The identification of each term or condition of the permit that is the basis of the certification;
 - b. The identification of the method(s) or other means used by the owner or operator for determining the status of compliance with each term and condition during the certification period, consistent with ARM 17.8.1212;
 - c. The status of compliance with each term and condition for the period covered by the certification, *including whether compliance during the period was continuous or intermittent* (based on the method or means identified in ARM 17.8.1213(7)(c)(ii), as described above); and
 - d. Such other facts as DEQ may require to determine the compliance status of the source.
- 4. All compliance certifications must be submitted to the Environmental Protection Agency, as well as to DEQ, at the addresses listed in the Notification Addresses Appendix of this permit.

C. Permit Shield

ARM 17.8, Subchapter 12, Operating Permit Program §1214(1)-(4)

- 1. The applicable requirements and non-federally enforceable requirements are included and specifically identified in this permit and the permit includes a precise summary of the requirements not applicable to the source. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements and any non-federally enforceable requirements as of the date of permit issuance.
- 2. The permit shield described in 1 above shall remain in effect during the appeal of any permit action (renewal, revision, reopening, or revocation and reissuance) to the Board of Environmental Review (Board), until such time as the Board renders its final decision.
- 3. Nothing in this permit alters or affects the following:
 - a. The provisions of Sec. 7603 of the FCAA, including the authority of the administrator under that section;
 - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

- c. The applicable requirements of the Acid Rain Program, consistent with Sec. 7651g(a) of the FCAA;
- d. The ability of the administrator to obtain information from a source pursuant to Sec. 7414 of the FCAA;
- e. The ability of DEQ to obtain information from a source pursuant to the Montana Clean Air Act, Title 75, Chapter 2, MCA;
- f. The emergency powers of DEQ under the Montana Clean Air Act, Title 75, Chapter 2, MCA; and
- g. The ability of DEQ to establish or revise requirements for the use of reasonably available control technology (RACT) as defined in ARM Title 17, Chapter 8. However, if the inclusion of a RACT into the permit pursuant to ARM Title 17, Chapter 8, Subchapter 12, is appealed to the Board, the permit shield, as it applies to the source's existing permit, shall remain in effect until such time as the Board has rendered its final decision.
- 4. Nothing in this permit alters or affects the ability of DEQ to take enforcement action for a violation of an applicable requirement or permit term demonstrated pursuant to ARM 17.8.106, Source Testing Protocol.
- 5. Pursuant to ARM 17.8.132, for the purpose of submitting a compliance certification, nothing in these rules shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance. However, when compliance or noncompliance is demonstrated by a test or procedure provided by permit or other applicable requirements, the source shall then be presumed to be in compliance or noncompliance unless that presumption is overcome by other relevant credible evidence.
- 6. The permit shield will not extend to minor permit modifications or changes not requiring a permit revision (see Sections I & J).
- 7. The permit shield will extend to significant permit modifications and transfer or assignment of ownership (see Sections K & O).

D. Monitoring, Recordkeeping, and Reporting Requirements

ARM 17.8, Subchapter 12, Operating Permit Program §1212(2)&(3)

- 1. Unless otherwise provided in this permit, the permittee shall maintain compliance monitoring records that include the following information:
 - a. The date, place as defined in the permit, and time of sampling or measurement;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;

- d. The analytical techniques or methods used;
- e. The results of such analyses; and
- f. The operating conditions at the time of sampling or measurement.
- 2. The permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. All monitoring data, support information, and required reports and summaries may be maintained in computerized form at the plant site if the information is made available to Department personnel upon request, which may be for either hard copies or computerized format. Strip-charts must be maintained in their original form at the plant site and shall be made available to Department personnel upon request.
- 3. The permittee shall submit to DEQ, at the addresses located in the Notification Addresses Appendix of this permit, reports of any required monitoring by February 15 and August 15 of each year, or more frequently if otherwise specified in an applicable requirement or elsewhere in the permit. The monitoring report submitted on February 15 of each year must include the required monitoring information for the period of July 1 through December 31 of the previous year. The monitoring report submitted on August 15 of each year must include the required monitoring information for the period of January 1 through June 30 of the current year. All instances of deviations from the permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official, consistent with ARM 17.8.1207.

E. Prompt Deviation Reporting

ARM 17.8, Subchapter 12, Operating Permit Program §1212(3)(b)

The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. To be considered prompt, deviations shall be reported to DEQ within the following timeframes (unless otherwise specified in an applicable requirement):

- 1. For deviations which may result in emissions potentially in violation of permit limitations:
- a. An initial phone notification (or faxed or electronic notification) describing the incident within 24 hours (or the next business day) of discovery; and,
- b. A follow-up written, faxed, or electronic report within 30 days of discovery of the deviation that describes the probable cause of the reported deviation and any corrective actions or preventative measures taken.
- 2. For deviations attributable to malfunctions, deviations shall be reported to DEQ in accordance with the malfunction reporting requirements under ARM 17.8.110; and

3. For all other deviations, deviations shall be reported to DEQ via a written, faxed, or electronic report within 90 days of discovery (as determined through routine internal review by the permittee).

Prompt deviation reports do not need to be resubmitted with regular semiannual (or other routine) reports but may be referenced by the date of submittal.

F. Emergency Provisions

The Environmental Protection Agency (EPA) has removed the "emergency" affirmative defense provisions from the Clean Air Act's (CAA) title V operating permit program regulations. These provisions established an affirmative defense that sources could have asserted in enforcement cases brought for noncompliance with technology-based emission limitations in operating permits, provided that the exceedances occurred due to qualifying emergency circumstances. These provisions, which have never been required elements of state operating permit programs, are being removed because they are inconsistent with the EPA's interpretation of the enforcement structure of the CAA. Each state which has emergency provisions within their title V operating permit programs will need to remove the language and provisions in title V operating permits at their next renewal or during normal permit revisions. The emergency provisions formerly located in this section are no longer applicable to this Title V operating permit.

Montana DEQ will be removing the following language from its Operating Permit Program but effectively immediately the following provisions are no longer valid due to EPA's removal of the emergency provisions.

ARM 17.8.1214 (Numbered Items 5 thru 8)

- (5) An emergency constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the conditions of (6) and (7) are met.
- (6) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
- (a) an emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - (b) the permitted facility was at the time being properly operated;
- (c) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- (d) the permittee submitted notice of the emergency to DEQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirements of ARM 17.8.1212(3) (c). This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- (7) In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (8) The provisions in (5) through (7) are in addition to any emergency, malfunction or upset provision contained in any applicable requirement.

G. ARM 17.8.1204 Inspection and Entry

ARM 17.8, Subchapter 12, Operating Permit Program §1213(3)&(4)

- 1. Upon presentation of credentials and other requirements as may be required by law, the permittee shall allow DEQ, the administrator, or an authorized representative (including an authorized contractor acting as a representative of DEQ or the administrator) to perform the following:
 - Enter the premises where a source required to obtain a permit is located or emissionsrelated activity is conducted, or where records must be kept under the conditions of the permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
 - Inspect at reasonable times any facilities, emission units, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - d. As authorized by the Montana Clean Air Act and rules promulgated thereunder, sample or monitor, at reasonable times, any substances or parameters at any location for the purpose of assuring compliance with the permit or applicable requirements.
- 2. The permittee shall inform the inspector of all workplace safety rules or requirements at the time of inspection. This section shall not limit in any manner DEQ's statutory right of entry and inspection as provided for in 75-2-403, MCA.

H. Fee Payment

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(f) and ARM 17.8, Subchapter 5, Air Quality Permit Application, Operation, and Open Burning Fees §505(3)-(5) (STATE ONLY)

- 1. The permittee must pay application and operating fees, pursuant to ARM Title 17, Chapter 8, Subchapter 5.
- 2. Annually, DEQ shall provide the permittee with written notice of the amount of the fee and the basis for the fee assessment. The air quality operation fee is due 30 days after receipt of the notice, unless the fee assessment is appealed pursuant to ARM 17.8.511. If any portion of the fee is not appealed, that portion of the fee that is not appealed is due 30 days after receipt of the notice. Any remaining fee, which may be due after the completion of an appeal, is due immediately upon issuance of the Board's decision or upon completion of any judicial review of the Board's decision.
- 3. If the permittee fails to pay the required fee (or any required portion of an appealed fee) within 90 days of the due date of the fee, DEQ may impose an additional assessment of 15% of the fee (or any required portion of an appealed fee) or \$100, whichever is greater, plus interest on the fee (or any required portion of an appealed fee), computed at the interest rate established under 15-31-510(3), MCA.

I. Minor Permit Modifications

ARM 17.8, Subchapter 12, Operating Permit Program §1226(3)&(11)

- 1. An application for a minor permit modification need only address in detail those portions of the permit application that require revision, updating, supplementation, or deletion, and may reference any required information that has been previously submitted.
- 2. The permit shield under ARM 17.8.1214 will not extend to any minor modifications processed pursuant to ARM 17.8.1226.

J. Changes Not Requiring Permit Revision

ARM 17.8, Subchapter 12, Operating Permit Program §1224(1)-(3), (5)&(6)

- 1. The permittee is authorized to make changes within the facility as described below, provided the following conditions are met:
 - a. The proposed changes do not require the permittee to obtain a Montana Air Quality Permit under ARM Title 17, Chapter 8, Subchapter 7;
 - b. The proposed changes are not modifications under Title I of the FCAA, or as defined in ARM Title 17, Chapter 8, Subchapters 8, 9, or 10;
 - The emissions resulting from the proposed changes do not exceed the emissions allowable under this permit, whether expressed as a rate of emissions or in total emissions;
 - d. The proposed changes do not alter permit terms that are necessary to enforce applicable emission limitations on emission units covered by the permit; and
 - e. The facility provides the administrator and DEQ with written notification at least 7 days prior to making the proposed changes.
- 2. The permittee and DEQ shall attach each notice provided pursuant to 1.e above to their respective copies of this permit.
- 3. Pursuant to the conditions above, the permittee is authorized to make Section 502(b)(10) changes, as defined in ARM 17.8.1201(30), without a permit revision. For each such change, the written notification required under 1.e above shall include a description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
- 4. The permittee may make a change not specifically addressed or prohibited by the permit terms and conditions without requiring a permit revision, provided the following conditions are met:

- a. Each proposed change does not weaken the enforceability of any existing permit conditions;
- b. DEQ has not objected to such change;
- c. Each proposed change meets all applicable requirements and does not violate any existing permit term or condition; and
- d. The permittee provides contemporaneous written notice to DEQ and the administrator of each change that is above the level for insignificant emission units as defined in ARM 17.8.1201(22) and 17.8.1206(3), and the written notice describes each such change, including the date of the change, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
- 5. The permit shield authorized by ARM 17.8.1214 shall not apply to changes made pursuant to ARM 17.8.1224(3) and (5), but is applicable to terms and conditions that allow for increases and decreases in emissions pursuant to ARM 17.8.1224(4).
- K. Significant Permit Modifications ARM 17.8, Subchapter 12, Operating Permit Program §1227(1), (3)&(4)
 - 1. The modification procedures set forth in 2 below must be used for any application requesting a significant modification of this permit. Significant modifications include the following:
 - a. Any permit modification that does not qualify as either a minor modification or as an administrative permit amendment;
 - b. Every significant change in existing permit monitoring terms or conditions;
 - c. Every relaxation of permit reporting or recordkeeping terms or conditions that limit DEQ's ability to determine compliance with any applicable rule, consistent with the requirements of the rule; or
 - d. Any other change determined by DEQ to be significant.
 - 2. Significant modifications shall meet all requirements of ARM Title 17, Chapter 8, including those for applications, public participation, and review by affected states and the administrator, as they apply to permit issuance and renewal, except that an application for a significant permit modification need only address in detail those portions of the permit application that require revision, updating, supplementation or deletion.
 - 3. The permit shield provided for in ARM 17.8.1214 shall extend to significant modifications.

L. Reopening for Cause

ARM 17.8, Subchapter 12, Operating Permit Program §1228(1)&(2)

This permit may be reopened and revised under the following circumstances:

- 1. Additional applicable requirements under the FCAA become applicable to the facility when the permit has a remaining term of 3 or more years. Reopening and revision of the permit shall be completed not later than 18 months after promulgation of the applicable requirement. No reopening is required under ARM 17.8.1228(1)(a) if the effective date of the applicable requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms or conditions have been extended pursuant to ARM 17.8.1220(12) or 17.8.1221(2);
- 2. Additional requirements (including excess emission requirements) become applicable to an affected source under the Acid Rain Program. Upon approval by the administrator, excess emission offset plans shall be deemed incorporated into the permit;
- 3. DEQ or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit; or
- 4. The administrator or DEQ determines that the permit must be revised or revoked and reissued to ensure compliance with the applicable requirements.

M. Permit Expiration and Renewal

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(g), §1220(11)&(12), and §1205(2)(d)

- 1. This permit is issued for a fixed term of 5 years.
- 2. Renewal of this permit is subject to the same procedural requirements that apply to permit issuance, including those for application, content, public participation, and affected state and administrator review.
- 3. Expiration of this permit terminates the permittee's right to operate unless a timely and administratively complete renewal application has been submitted consistent with ARM 17.8.1221 and 17.8.1205(2)(d). If a timely and administratively complete application has been submitted, all terms and conditions of the permit, including the application shield, remain in effect after the permit expires until the permit renewal has been issued or denied.
- 4. For renewal, the permittee shall submit a complete air quality operating permit application to DEQ not later than 6 months prior to the expiration of this permit, unless otherwise specified. If necessary to ensure that the terms of the existing permit will not lapse before renewal, DEQ may specify, in writing to the permittee, a longer time period for submission of the renewal application. Such written notification must be provided at least 1 year before the renewal application due date established in the existing permit.

N. Severability Clause

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(i)&(l)

- 1. The administrative appeal or subsequent judicial review of the issuance by DEQ of an initial permit under this subchapter shall not impair in any manner the underlying applicability of all applicable requirements, and such requirements continue to apply as if a final permit decision had not been reached by DEQ.
- 2. If any provision of a permit is found to be invalid, all valid parts that are severable from the invalid part remain in effect. If a provision of a permit is invalid in one or more of its applications, the provision remains in effect in all valid applications that are severable from the invalid applications.

O. Transfer or Assignment of Ownership

ARM 17.8, Subchapter 12, Operating Permit Program §1225(2)&(4)

- 1. If an administrative permit amendment involves a change in ownership or operational control, the applicant must include in its request to DEQ a written agreement containing a specific date for the transfer of permit responsibility, coverage and liability between the current and new permittee.
- 2. The permit shield provided for in ARM17.8.1214 shall not extend to administrative permit amendments.

P. Emissions Trading, Marketable Permits, Economic Incentives

ARM 17.8, Subchapter 12, Operating Permit Program §1226(2)

Notwithstanding ARM 17.8.1226(1) and (7), minor air quality operating permit modification procedures may be used for permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that such minor permit modification procedures are explicitly provided for in the Montana State Implementation Plan or in applicable requirements promulgated by the administrator.

Q. No Property Rights Conveyed

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(d)

This permit does not convey any property rights of any sort, or any exclusive privilege.

R. Testing Requirements

ARM 17.8, Subchapter 1, General Provisions §105

The permittee shall comply with ARM 17.8.105.

S. Source Testing Protocol

ARM 17.8, Subchapter 1, General Provisions §106

The permittee shall comply with ARM 17.8.106.

T. Malfunctions

ARM 17.8, Subchapter 1, General Provisions §110

The permittee shall comply with ARM 17.8.110.

U. Circumvention

ARM 17.8, Subchapter 1, General Provisions §111

The permittee shall comply with ARM 17.8.111.

V. Motor Vehicles

ARM 17.8, Subchapter 3, Emission Standards §325

The permittee shall comply with ARM 17.8.325.

W. Annual Emissions Inventory

ARM 17.8, Subchapter 5, Air Quality Permit Application, Operation and Open Burning Fees §505 (STATE ONLY)

The permittee shall supply DEQ with annual production and other information for all emission units necessary to calculate actual or estimated actual amount of air pollutants emitted during each calendar year. Information shall be gathered on a calendar-year basis and submitted to DEQ by the date required in the emission inventory request, unless otherwise specified in this permit. Information shall be in the units required by DEQ.

X. Open Burning

ARM 17.8, Subchapter 6, Open Burning \$604, 605 and 606

The permittee shall comply with ARM 17.8.604, 605 and 606.

Y. Montana Air Quality Permits

ARM 17.8, Subchapter 7, Permit, Construction and Operation of Air Contaminant Sources §745 and 764

1. Except as specified, no person shall construct, install, modify or use any air contaminant source or stack associated with any source without first obtaining a permit from DEQ or

Board. A permit is not required for those sources or stacks as specified by ARM 17.8.744(1)(a)-(k).

- 2. The permittee shall comply with ARM 17.8.743, 744, 745, 748, and 764.
- 3. ARM 17.8.745(1) specifies de minimis changes as construction or changed conditions of operation at a facility holding a Montana Air Quality Permit (MAQP) issued under Chapter 8 that does not increase the facility's potential to emit by more than 5 tons per year of any pollutant, except:
 - a. Any construction or changed condition that would violate any condition in the facility's existing MAQP or any applicable rule contained in Chapter 8 is prohibited, except as provided in ARM 17.8.745(2);
 - b. Any construction or changed conditions of operation that would qualify as a major modification under Subchapters 8, 9 or 10 of Chapter 8;
 - c. Any construction or changed condition of operation that would affect the plume rise or dispersion characteristic of emissions that would cause or contribute to a violation of an ambient air quality standard or ambient air increment as defined in ARM 17.8.804;
 - d. Any construction or improvement project with a potential to emit more than 5 tons per year may not be artificially split into smaller projects to avoid Montana Air Quality Permitting; or
 - e. Emission reductions obtained through offsetting within a facility are not included when determining the potential emission increase from construction or changed conditions of operation, unless such reductions are made federally enforceable.
- 4. Any facility making a de minimis change pursuant to ARM 17.8.745(1) shall notify DEQ if the change would include a change in control equipment, stack height, stack diameter, stack gas temperature, source location or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1).

Z. National Emission Standard for Asbestos

40 CFR, Part 61, Subpart M

The permittee shall not conduct any asbestos abatement activities except in accordance with 40 CFR 61, Subpart M (National Emission Standard for Hazardous Air Pollutants for Asbestos).

AA. Asbestos

ARM 17.74, Subchapter 3, General Provisions and Subchapter 4, Fees

The permittee shall comply with ARM 17.74.301, et seq., and ARM 17.74.401, et seq. (State only)

BB. Stratospheric Ozone Protection – Servicing of Motor Vehicle Air Conditioners 40 CFR, Part 82, Subpart B

If the permittee performs a service on motor vehicles and this service involves ozone-depleting substance/refrigerant in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR 82, Subpart B.

CC. Stratospheric Ozone Protection – Recycling and Emission Reductions 40 CFR, Part 82, Subpart F

The permittee shall comply with the standards for recycling and emission reductions in 40 CFR 82, Subpart F, except as provided for MVACs in Subpart B:

- 1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156;
- 2. Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158;
- 3. Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technical certification program pursuant to §82.161;
- 4. Persons disposing of small appliances, MVACs and MVAC-like (as defined at §82.152) appliances must comply with recordkeeping requirements pursuant to §82.166;
- 5. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156; and
- 6. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

DD. Emergency Episode Plan

The permittee shall comply with the requirements contained in Chapter 9.7 of the State of Montana Air Quality Control Implementation Plan.

Each major source emitting 100 tons per year located in a Priority I Air Quality Control Region, shall submit to DEQ a legally enforceable Emergency Episode Action Plan (EEAP) that details how the source will curtail emissions during an air pollutant emergency episode. The industrial EEAP shall be in accordance with DEQ's EEAP and shall be submitted according to a timetable developed by DEQ, following Priority I reclassification.

EE. Definitions

Terms not otherwise defined in this permit or in the Definitions and Abbreviations Appendix B of this permit, shall have the meaning assigned to them in the referenced regulations.

APPENDICES

Appendix A INSIGNIFICANT EMISSIONS UNITS

Disclaimer: The information in this appendix is not State or Federally enforceable, but is presented to assist GSM, the permitting authority, inspectors, and the public.

Pursuant to ARM 17.8.1201(22)(a), an insignificant emission unit means any activity or emissions unit located within a source that: (i) has a potential to emit less than five tons per year of any regulated pollutant; (ii) has a potential to emit less than 500 pounds per year of lead; (iii) has a potential to emit less than 500 pounds per year of hazardous air pollutants listed pursuant to section 7412 (b) of the FCAA; and (iv) is not regulated by an applicable requirement, other than a generally applicable requirement that applies to all emission units subject to Subchapter 12.

List of Insignificant Activities:

| Emissions Unit ID | Description |
|-------------------|---------------------|
| IE01 | Refinery Dryer Oven |
| | |
| | |

The Refinery Dryer Oven has been updated from the previous version of the Operating Permit.

Appendix B DEFINITIONS and ABBREVIATIONS

"Act" means the Clean Air Act, as amended, 42 U.S. 7401, et seq.

"Administrative permit amendment" means an air quality operating permit revision that:

- (a) corrects typographical errors;
- (b) identifies a change in the name, address or phone number of any person identified in the air quality operating permit, or identifies a similar minor administrative change at the source;
- (c) requires more frequent monitoring or reporting by GSM;
- (d) requires changes in monitoring or reporting requirements that DEQ deems to be no less stringent than current monitoring or reporting requirements;
- (e) allows for a change in ownership or operational control of a source if DEQ has determined that no other change in the air quality operating permit is necessary, consistent with ARM 17.8.1225; or
- (f) incorporates any other type of change which DEQ has determined to be similar to those revisions set forth in (a)-(e), above.
- "Applicable requirement" means all of the following as they apply to emissions units in a source requiring an air quality operating permit (including requirements that have been promulgated or approved by DEQ or the administrator through rule making at the time of issuance of the air quality operating permit, but have future-effective compliance dates, provided that such requirements apply to sources covered under the operating permit):
 - (a) any standard, rule, or other requirement, including any requirement contained in a consent decree or judicial or administrative order entered into or issued by DEQ, that is contained in the Montana state implementation plan approved or promulgated by the administrator through rule making under Title I of the FCAA;
 - (b) any federally enforceable term, condition or other requirement of any Montana Air Quality Permit issued by DEQ under Subchapters 7, 8, 9 and 10 of this chapter, or pursuant to regulations approved or promulgated through rule making under Title I of the FCAA, including parts C and D;
 - (c) any standard or other requirement under Section 7411 of the FCAA, including Section 7411(d);
 - (d) any standard or other requirement under Section 7412 of the FCAA, including any requirement concerning accident prevention under Section 7412(r)(7), but excluding the contents of any risk management plan required under Section 7412(r);
 - (e) any standard or other requirement of the acid rain program under Title IV of the FCAA or regulations promulgated thereunder;
 - (f) any requirements established pursuant to Section 7661c(b) or Section 7414(a)(3) of the FCAA;
 - (g) any standard or other requirement governing solid waste incineration, under Section 7429 of the FCAA;
 - (h) any standard or other requirement for consumer and commercial products, under Section 7511b(e) of the FCAA;
 - (i) any standard or other requirement for tank vessels, under Section 7511b(f) of the FCAA;

- (j) any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the FCAA, unless the administrator determines that such requirements need not be contained in an air quality operating permit;
- (k) any national ambient air quality standard or increment or visibility requirement under part C of Title I of the FCAA, but only as it would apply to temporary sources permitted pursuant to Section 7661c(e) of the FCAA; or
- (l) any federally enforceable term or condition of any air quality open burning permit issued by DEQ under Subchapter 6.
- "Department" means the Montana Department of Environmental Quality.
- "Emissions unit" means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under Section 7412(b) of the FCAA. This term is not meant to alter or affect the definition of the term "unit" for purposes of Title IV of the FCAA.
- "FCAA" means the Federal Clean Air Act, as amended.
- "Federally enforceable" means all limitations and conditions which are enforceable by the administrator, including those requirements developed pursuant to 40 CFR Parts 60 and 61, requirements within the Montana state implementation plan, and any permit requirement established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51, Subpart I, including operating permits issued under an EPA approved program that is incorporated into the Montana state implementation plan and expressly requires adherence to any permit issued under such program.
- "Fugitive emissions" means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.
- "General air quality operating permit" or "general permit" means an air quality operating permit that meets the requirements of ARM 17.8.1222, covers multiple sources in a source category, and is issued in lieu of individual permits being issued to each source.
- "Hazardous air pollutant" means any air pollutant listed as a hazardous air pollutant pursuant to Section 112(b) of the FCAA.
- "Non-federally enforceable requirement" means the following as they apply to emissions units in a source requiring an air quality operating permit:
 - (a) any standard, rule, or other requirement, including any requirement contained in a consent decree, or judicial or administrative order entered into or issued by DEQ, that is not contained in the Montana state implementation plan approved or promulgated by the administrator through rule making under Title I of the FCAA;
 - (b) any term, condition or other requirement contained in any Montana Air Quality Permit issued by DEQ under Subchapters 7, 8, 9 and 10 of this chapter that is not federally enforceable;
 - (c) does not include any Montana ambient air quality standard contained in Subchapter 2 of this chapter.

"Permittee" means the owner or operator of any source subject to the permitting requirements of this subchapter, as provided in ARM 17.8.1204, that holds a valid air quality operating permit or has submitted a timely and complete permit application for issuance, renewal, amendment, or modification pursuant to this subchapter.

"Regulated air pollutant" means the following:

- (a) nitrogen oxides or any volatile organic compounds;
- (b) any pollutant for which a national ambient air quality standard has been promulgated;
- (c) any pollutant that is subject to any standard promulgated under Section 7411 of the FCAA;
- (d) any Class I or II substance subject to a standard promulgated under or established by Title VI of the FCAA; or
- (e) any pollutant subject to a standard or other requirement established or promulgated under Section 7412 of the FCAA, including but not limited to the following:
 - (i) any pollutant subject to requirements under Section 7412(j) of the FCAA. If the administrator fails to promulgate a standard by the date established in Section 7412(e) of the FCAA, any pollutant for which a subject source would be major shall be considered to be regulated on the date 18 months after the applicable date established in Section 7412(e) of the FCAA;
 - (ii) any pollutant for which the requirements of Section 7412(g)(2) of the FCAA have been met but only with respect to the individual source subject to Section 7412(g)(2) requirement.

"Responsible official" means one of the following:

- (a) For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
 - (i) the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
 - (ii) the delegation of authority to such representative is approved in advance by DEQ.
- (b) For a partnership or sole proprietorship: a general partner or the proprietor, respectively.
- (c) For a municipality, state, federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a regional administrator of the environmental protection agency).
- (d) For affected sources: the designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the FCAA or the regulations promulgated thereunder are concerned, and the designated representative for any other purposes under this subchapter.

Abbreviations:

ARM Administrative Rules of Montana
ASTM American Society of Testing Materials
BACT Best Available Control Technology

BDT bone dry tons

BTU British Thermal Unit CFR Code of Federal Regulations

CO carbon monoxide

DEQ Department of Environmental Quality

dscf dry standard cubic foot

dscfm dry standard cubic foot per minute
EEAP Emergency Episode Action Plan
EDA

EPA U.S. Environmental Protection Agency

EPA Method Test methods contained in 40 CFR 60, Appendix A

EU emissions unit

FCAA Federal Clean Air Act

gr grains

HAP hazardous air pollutant IEU insignificant emissions unit

Mbdft thousand board feet

Method 5 40 CFR 60, Appendix A, Method 5 Method 9 40 CFR 60, Appendix A, Method 9

MMbdft million board feet

MMBTU million British Thermal Units

NOx oxides of nitrogen NO₂ nitrogen dioxide

O₂ oxygen Pb lead

PM particulate matter

PM10 particulate matter less than 10 microns in size

psi pounds per square inch scf standard cubic feet

SIC Source Industrial Classification

SO₂ sulfur dioxide SOx oxides of sulfur tpy tons per year U.S.C. United States Code VE visible emissions

VOC volatile organic compound

Appendix C NOTIFICATION ADDRESSES

Compliance Notifications:

Montana Department of Environmental Quality Air, Energy and Mining Division Air Quality Bureau P.O. Box 200901 Helena, MT 59620-0901

Enforcement and Compliance Assurance Division Air Enforcement Branch US EPA Region VIII, Montana Office 10 West 15th Street, Suite 3200 Helena, MT 59626

Permit Modifications:

Montana Department of Environmental Quality Air, Energy and Mining Division Air Quality Bureau P.O. Box 200901 Helena, MT 59620-0901

Air and Radiation Division Permit and Monitoring Branch US EPA Region VIII, 8ARD-PM 1595 Wynkoop Street Denver, CO 80202-1129

Effective Date: 11/08/2024

OP1689-02 C-1 Date of Decision: 10/08/2024

Appendix D AIR QUALITY INSPECTOR INFORMATION

Disclaimer: The information in this appendix is not State or Federally enforceable, but is

presented to assist GSM, permitting authority, inspectors, and the public (none

provided).

1. Directions to Plant

Directions from Butte: Follow I-90 East for 25 miles. Take Exit 249 and turn right (South) for a half mile. Turn left (East) onto MT 2 East for 6 miles. Turn left onto Golden Sunlight Mine Road and follow the access road uphill for 2 miles to parking area/guardhouse.

Directions from Helena: Follow I-15 South 27 miles to the town of Boulder. Turn left onto MT-69 for 32 miles. Turn right onto MT-2 West for 1 mile. Turn right onto Golden Sunlight Mine Road and follow the access road uphill for 2 miles to parking area/guardhouse.

Directions from Bozeman: Follow I-90 West for 50 miles. Take Exit 256 in Cardwell and turn right onto MT-2 West for 5 miles. Turn right onto Golden Sunlight Mine Road and follow the access road uphill for 2 miles to parking area/guardhouse.

2. Safety Equipment Required

Hard hat, safety glasses, reflective vest, long pants, and safety-toe footwear; GSM can supply all required PPE for those that do not have it (except for very large or small footwear sizes).

3. Facility Plot Plan

A facility plot plan was included as part of the Title V operating permit application submitted to DEQ on April 3, 2014. An updated plot plan was submitted with the renewal application #OP1689-01.