

Permit No. 77414 (As Amended by Significant Permit Revision No. 99644)

PLACE ID No. 1390

PERMITTEE: Freeport-McMoRan Bagdad Inc.
FACILITY: Bagdad Mine
PERMIT TYPE: Class II Air Quality Permit
DATE ISSUED: November 20, 2019 (As Amended on Date Pending)
EXPIRY DATE: November 18, 2024

SUMMARY

This Class II air quality permit is issued to Freeport-McMoRan Bagdad Inc. (FMBI), the Permittee, for the continued operation of the copper ore mining and processing facility located at the terminus of Highway 96 in Bagdad, Yavapai County, Arizona. This permit renews and supersedes Permit No. 77414.

The facility is a synthetic minor source of regulated air pollutants for permitting purposes under Arizona Administrative Code (A.A.C.) Title 19, Chapter 2, Articles 3 and 4. The facility's potential to emit (PTE) from facility-wide operations is below major source thresholds with voluntary emissions limitations. This includes Prevention of Significant Deterioration (PSD) major source thresholds (for attainment/non-categorical), and hazardous air pollutant (HAP) major source thresholds. Consequently, the facility is a non-Title V, minor PSD, and minor HAP source which requires a Class II air quality permit.

This permit is issued in accordance with Arizona Revised Statutes § 49-426. It contains requirements from Title 18, Chapter 2 of the A.A.C. and Title 40 of the Code of Federal Regulations (CFR). All definitions, terms, and conditions used in this permit conform to those in the A.A.C. R18-2-101 et. seq. and Title 40 of the CFR, except as otherwise defined in this permit.

Significant Permit Revision (SPR) No. 99644

In Permit No. 77414, FMBI was authorized to operate AOS1 called the Two Concentrator Operations. This operating scenario included modified primary crushing and overland conveying operations, additional milling operations, and additional bulk flotation operations. The additional milling and bulk flotation operations are referred to as the Second Concentrator. The AOS1 operations previously authorized were not constructed nor operated due to unfavorable economic conditions. With the current economic conditions, FMBI is planning to move forward with the Two Concentrator Operations under AOS1. However, FMBI is requesting to update the design of Alternate Operating Scenario 1 (AOS1) through this SPR. Therefore, this SPR authorizes FMBI, the Permittee, to make the following changes:

- 1. PC1 and Overland Conveying**
 - A new PC1 will be purchased instead of reconstructing/refurbishing the old PC1.
 - The overland conveyor transfer apron feeder will be removed.
 - All ore processed by PC1 will be transferred to the Second Concentrator.
 - Equipment names will be updated.
 - Dust collector exhaust flow rates will be updated.

- 2. PC2 and Overland Conveying**
 - The overland conveyor transfer apron feeder will be removed.
 - Free-Standing Stacker 6 will be retained.
 - All ore processed by PC2 will be transferred to the Bagdad Concentrator.

- Fogging systems will be used instead of dust collectors to control emissions from non-fugitive transfer points during overland conveying.
- 3. Second Concentrator Milling Operations**
 - Autogenous mills (wet processes) will be used instead of secondary crushers.
 - An additional ball mill and regrind mill will be used.
 - Screening and material handling operations will have a different configuration.
 - Equipment names will be updated.
 - Dust collector exhaust flow rates will be updated.
 - 4. Second Concentrator Flotation Operations**
 - Both bulk and molybdenum flotation operations will be included (i.e. the copper/molybdenum concentrate from the Second Concentrator will no longer be combined with the copper/molybdenum concentrate from the Bagdad Concentrator). This will require addition of the Second Concentrator Concentrate Handling Operations and Second Concentrator Lime and Other Reagent Operations.
 - Cleaner flotation will be added.
 - Thickeners for bulk concentrate, copper concentrate, and molybdenum concentrate will be added.
 - Equipment names will be updated.
 - 5. Second Concentrator Concentrate Handling Operations**
 - Filtering and loadout for the copper concentrate from the Second Concentrator will be added.
 - Filtering, drying controlled by a scrubber, and packaging of the molybdenum concentrate from the Second Concentrator will be added.
 - 6. Second Concentrator Lime and Other Reagent Operations**
 - Because of the additional Second Concentrator flotation operations, reagent systems for lime, flocculant, xanthate, test reagent, and sodium hydrosulfide will be added.
 - 7. Second Concentrator Prill Handling Operations**
 - An additional prill bin will be added.
 - 8. Second Concentrator Emergency Internal Combustion Engines**
 - Two diesel emergency generators (609 and 762 horsepower, respectively) and two propane emergency generators (each 84.7 horsepower) will be added to provide backup power to the grinding/flotation line, byproduct separation and handling area, concentrator wastewater treatment plant, and the primary crusher area wastewater treatment plant.
 - 9. Maximum Mining Rates**
 - To achieve the production targets associated with the updated design of AOS1, maximum mining rates and associated operations will be updated, such as blasting rates and mobile equipment usage including haul trucks. The updates will affect emissions from drilling, blasting, haul truck and other vehicle travel, dozer and grader operations, and loading/unloading of mined material.

The upgrades will provide operational flexibility and allow PC1 as well as the accompanying Second Concentrator to operate independently of the Bagdad Concentrator. The changes meet the requirements for a SPR as outlined in A.A.C. R18-2-320.

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ATTACHMENT "A": GENERAL PROVISIONS

I. PERMIT EXPIRATION AND RENEWAL

- A. This permit is valid for a period of five (5) years from the date of issuance.
[ARS § 49-426.F, A.A.C. R18-2-306.A.1]
- B. The Permittee shall submit an application for renewal of this permit at least six (6) months, but not more than eighteen (18) months, prior to the date of permit expiration.
[A.A.C. R18-2-304.D.2]

II. COMPLIANCE WITH PERMIT CONDITIONS

- A. The Permittee shall comply with all conditions of this permit including all applicable requirements of the Arizona Revised Statutes (A.R.S.) Title 49, Chapter 3, and the air quality rules under Title 18, Chapter 2 of the Arizona Administrative Code. Any permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. In addition, noncompliance with any federally enforceable requirement constitutes a violation of the Clean Air Act.
[A.A.C. R18-2-306.A.8.a]
- B. 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 this permit.
[A.A.C. R18-2-306.A.8.b]

III. PERMIT REVISION, REOPENING, REVOCATION AND REISSUANCE, OR TERMINATION FOR CAUSE

- A. The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[A.A.C. R18-2-306.A.8.c]
- B. The permit shall be reopened and revised under any of the following circumstances:
1. The Director or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; and
[A.A.C. R18-2-321.A.1.c]
 2. The Director or the Administrator determines that the permit needs to be revised or revoked to assure compliance with the applicable requirements.
[A.A.C. R18-2-321.A.1.d]
- C. Proceedings to reopen and issue a permit, including appeal of any final action relating to a permit reopening, shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopening

shall be made as expeditiously as practicable. Permit reopenings shall not result in a resetting of the five-year permit term.

[A.A.C. R18-2-321.A.2]

IV. POSTING OF PERMIT

A. The Permittee shall post this permit or a certificate of permit issuance on location where the equipment is installed in such a manner as to be clearly visible and accessible. All equipment covered by this permit shall be clearly marked with one of the following:

1. Current permit number; or
2. Serial number or other equipment ID number that is also listed in the permit to identify that piece of equipment.

[A.A.C. R18-2-315.A]

B. A copy of the complete permit shall be kept on site.

[A.A.C. R18-2-315.B]

V. FEE PAYMENT

[A.A.C. R18-2-306.A.9 and -326]

The Permittee shall pay fees to the Director pursuant to ARS § 49-426(E) and A.A.C. R18-2-326.

[A.A.C. R18-2-306.A.9 and -326]

VI. EMISSIONS INVENTORY QUESTIONNAIRE

A. The Permittee shall complete and submit to the Director an emissions inventory questionnaire no later than June 1 every three years beginning June 1, 2021. At the Director's request, the Permittee may be required to complete and submit emissions inventory questionnaires in addition to the triennial emissions inventory questionnaire. The Director shall notify the Permittee in writing of the decision to require additional emissions inventory questionnaires.

[A.A.C. R18-2-327.A.1.b]

B. The emissions inventory questionnaire shall be on an electronic or paper form provided by the Director and shall include the information required by A.A.C. R18-2-327.A.3 for the previous calendar year.

[A.A.C. R18-2-327.A.3]

VII. COMPLIANCE CERTIFICATION

A. The Permittee shall submit a compliance certification to the Director annually which describes the compliance status of the source with respect to each permit condition. The certification shall be submitted no later than March 15th and shall report the compliance status of the source during the period between February 1st of the previous year and January 31st of the current year.

[A.A.C. R18-2-309.2.a]

B. The compliance certifications shall include the following:

1. Identification of each term or condition of the permit that is the basis of the certification;
[A.A.C. R18-2-309.2.c.i]
 2. Identification of the methods or other means used by the Permittee for determining the compliance status with each term and condition during the certification period;
[A.A.C. R18-2-309.2.c.ii]
 3. Status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certifications shall identify each deviation (including any deviations reported pursuant to Condition XII.B of this Attachment) during the period covered by the certification and take it into account for consideration in the compliance certification; and
[A.A.C. R18-2-309.2.c.iii]
 4. Other facts the Director may require in determining the compliance status of the source.
[A.A.C. R18-2-309.2.c.iv]
- C. A progress report on all outstanding compliance schedules shall be submitted every six months beginning six months after permit issuance.
[A.A.C. R18-2-309.5.d]

VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS

Any document required to be submitted by this permit, including reports, shall contain a certification by a responsible official of truth, accuracy, and completeness. This certification 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.A.C. R18-2-309.3]

IX. INSPECTION AND ENTRY

Upon presentation of proper credentials, the Permittee shall allow the Director or the authorized representative of the Director to:

- A. Enter upon the Permittee's premises where a source is located, emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;
[A.A.C. R18-2-309.4.a]
- B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
[A.A.C. R18-2-309.4.b]
- C. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
[A.A.C. R18-2-309.4.c]
- D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and

[A.A.C. R18-2-309.4.d]

E. Record any inspection by use of written, electronic, magnetic and photographic media.

[A.A.C. R18-2-309.4.e]

X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD

If this source becomes subject to a standard promulgated by the Administrator pursuant to Section 112(d) of the Act, then the Permittee shall, within twelve months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

[A.A.C. R18-2-304.D.3]

XI. ACCIDENTAL RELEASE PROGRAM

If this source becomes subject to the provisions of 40 CFR Part 68, then the Permittee shall comply with these provisions according to the time line specified in 40 CFR Part 68.

[40 CFR Part 68]

XII. EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCY REPORTING

A. Excess Emissions Reporting

[A.A.C. R18-2-310.01.A, B, and C]

1. Excess emissions shall be reported as follows:

a. The Permittee shall report to the Director any emissions in excess of the limits established by this permit. Such report shall be in two parts as specified below:

(1) Notification by telephone or facsimile within 24 hours of the time when the Permittee first learned of the occurrence of excess emissions including all available information from Condition XII.A.1.b below.

(2) Detailed written notification by submission of an excess emissions report within 72 hours of the notification pursuant to Condition XII.A.1.a(1) above.

[A.A.C. R18-2-310.01.A]

b. The report shall contain the following information:

(1) Identity of each stack or other emission point where the excess emissions occurred;

[A.A.C. R18-2-310.01.B.1]

(2) Magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;

[A.A.C. R18-2-310.01.B.2]

- (3) Time and duration, or expected duration, of the excess emissions;
[A.A.C. R18-2-310.01.B.3]
 - (4) Identity of the equipment from which the excess emissions emanated;
[A.A.C. R18-2-310.01.B.4]
 - (5) Nature and cause of the emissions;
[A.A.C. R18-2-310.01.B.5]
 - (6) If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions;
[A.A.C. R18-2-310.01.B.6]
 - (7) Steps that were or are being taken to limit the excess emissions; and
[A.A.C. R18-2-310.01.B.7]
 - (8) If the excess emissions resulted from start-up or malfunction, the report shall contain a list of the steps taken to comply with the permit procedures governing source operation during periods of startup or malfunction.
[A.A.C. R18-2-310.01.B.8]
2. In the case of continuous or recurring excess emissions, the notification requirements shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in such notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period, or changes in the nature of the emissions as originally reported, shall require additional notification pursuant to Condition XII.A.1 above.
[A.A.C. R18-2-310.01.C]

B. Permit Deviations Reporting

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. Where the applicable requirement contains a definition of prompt or otherwise specifies a timeframe for reporting deviations, that definition or timeframe shall govern. Where the applicable requirement does not address the timeframe for reporting deviations, the Permittee shall submit reports of deviations according to the following schedule:

1. Notice that complies with Condition XII.A above is prompt for deviations that constitute excess emissions;
[A.A.C. R18-2-306.A.5.b.i]
2. Notice that is submitted within two working days of discovery of the deviation is prompt for deviations of permit conditions identified by Condition I.B.3 of Attachment "B"; and
[A.A.C. R18-2-306.A.5.b.ii]

3. Except as provided in Conditions XII.B.1 and 2, prompt notification of all other types of deviations shall be annually, concurrent with the annual compliance certifications required in Section VII, and can be submitted via the “Annual/Semiannual Deviation Monitoring Report” form available on the Arizona Department of Environmental Quality Website.

[A.A.C. R18-2-306.A.5.b.ii]

C. Emergency Provision

1. An “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, that require immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

[A.A.C. R18-2-306.E.1]

2. An emergency constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if Condition XII.C.3 below is met.

[A.A.C. R18-2-306.E.2]

3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

[A.A.C. R18-2-306.E.3]

- a. An emergency occurred and that the Permittee can identify the cause(s) of the emergency;

[A.A.C. R18-2-306.E.3.a]

- b. The permitted facility was being properly operated at the time of the emergency;

[A.A.C. R18-2-306.E.3.b]

- c. During the period of the emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and

[A.A.C. R18-2-306.E.3.c]

- d. The Permittee submitted notice of the emergency to the Director by certified mail, facsimile, or hand delivery within two working days of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

[A.A.C. R18-2-306.E.3.d]

4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

[A.A.C. R18-2-306.E.4]

5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

[A.A.C. R18-2-306.E.5]

D. Affirmative Defenses for Excess Emissions Due to Malfunctions, Startup, and Shutdown

1. Applicability

A.A.C. R18-2-310 establishes affirmative defenses for certain emissions in excess of an emission standard or limitation and applies to all emission standards or limitations except for the following standards or limitations:

- a. Promulgated pursuant to Sections 111 or 112 of the Act;
[A.A.C. R18-2-310.A.1]
- b. Promulgated pursuant to Titles IV or VI of the Clean Air Act;
[A.A.C. R18-2-310.A.2]
- c. Contained in any Prevention of Significant Deterioration (PSD) or New Source Review (NSR) permit issued by the U.S. EPA;
[A.A.C. R18-2-310.A.3]
- d. Contained in A.A.C. R18-2-715.F; or
[A.A.C. R18-2-310.A.4]
- e. Included in a permit to meet the requirements of A.A.C. R18-2-406.A.5.
[A.A.C. R18-2-310.A.5]

2. Affirmative Defense for Malfunctions

Emissions in excess of an applicable emission limitation due to malfunction shall constitute a violation. When emissions in excess of an applicable emission limitation are due to a malfunction, the Permittee has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the Permittee has complied with the reporting requirements of A.A.C. R18-2-310.01 and has demonstrated all of the following:

[A.A.C. R18-2-310.B]

- a. The excess emissions resulted from a sudden and unavoidable breakdown of process equipment or air pollution control equipment beyond the reasonable control of the Permittee;
[A.A.C. R18-2-310.B.1]
- b. The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
[A.A.C. R18-2-310.B.2]
- c. If repairs were required, the repairs were made in an expeditious fashion when the applicable emission limitations were being exceeded. Off-shift labor and overtime were utilized where practicable to ensure that the

repairs were made as expeditiously as possible. If off-shift labor and overtime were not utilized, the Permittee satisfactorily demonstrated that the measures were impracticable;

[A.A.C. R18-2-310.B.3]

d. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;

[A.A.C. R18-2-310.B.4]

e. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;

[A.A.C. R18-2-310.B.5]

f. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;

[A.A.C. R18-2-310.B.6]

g. During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Title 18, Chapter 2, Article 2 of the Arizona Administrative Code that could be attributed to the emitting source;

[A.A.C. R18-2-310.B.7]

h. The excess emissions did not stem from any activity or event that could have been foreseen and avoided, or planned, and could not have been avoided by better operations and maintenance practices;

[A.A.C. R18-2-310.B.8]

i. All emissions monitoring systems were kept in operation if at all practicable; and

[A.A.C. R18-2-310.B.9]

j. The Permittee's actions in response to the excess emissions were documented by contemporaneous records.

[A.A.C. R18-2-310.B.10]

3. Affirmative Defense for Startup and Shutdown

a. Except as provided in Condition XII.D.3 below, and unless otherwise provided for in the applicable requirement, emissions in excess of an applicable emission limitation due to startup and shutdown shall constitute a violation. When emissions in excess of an applicable emission limitation are due to startup and shutdown, the Permittee has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the Permittee has complied with the reporting requirements of A.A.C. R18-2-310.01 and has demonstrated all of the following:

[A.A.C. R18-2-310.C.1]

(1) The excess emissions could not have been prevented through careful and prudent planning and design;

[A.A.C. R18-2-310.C.1.a]

- (2) If the excess emissions were the result of a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe damage to air pollution control equipment, production equipment, or other property;

[A.A.C. R18-2-310.C.1.b]

- (3) The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;

[A.A.C. R18-2-310.C.1.c]

- (4) The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;

[A.A.C. R18-2-310.C.1.d]

- (5) All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;

[A.A.C. R18-2-310.C.1.e]

- (6) During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Title 18, Chapter 2, Article 2 of the Arizona Administrative Code that could be attributed to the emitting source;

[A.A.C. R18-2-310.C.1.f]

- (7) All emissions monitoring systems were kept in operation if at all practicable; and

[A.A.C. R18-2-310.C.1.g]

- (8) Contemporaneous records documented the Permittee's actions in response to the excess emissions.

[A.A.C. R18-2-310.C.1.h]

- b. If excess emissions occur due to a malfunction during routine startup and shutdown, then those instances shall be treated as other malfunctions subject to Condition XII.D.2 above.

[A.A.C. R18-2-310.C.2]

4. Affirmative Defense for Malfunctions During Scheduled Maintenance

If excess emissions occur due to a malfunction during scheduled maintenance, then those instances will be treated as other malfunctions subject to Condition XII.D.2 above.

[A.A.C. R18-2-310.D]

5. Demonstration of Reasonable and Practicable Measures

For an affirmative defense under Condition XII.D.2 or Condition XII.D.3 above, the Permittee shall demonstrate, through submission of the data and information

required by this Condition XII.D and Condition XII.A.1 above, that all reasonable and practicable measures within the Permittee's control were implemented to prevent the occurrence of the excess emissions.

[A.A.C. R18-2-310.E]

XIII. RECORDKEEPING REQUIREMENTS

A. The Permittee shall keep records of all required monitoring information including, but not limited to, the following:

[A.A.C. R18-2-306.A.4.a]

1. The date, place as defined in the permit, and time of sampling or measurements;
[A.A.C. R18-2-306.A.4.a.i]
2. The date(s) any analyses were performed;
[A.A.C. R18-2-306.A.4.a.ii]
3. The name of the company or entity that performed the analyses;
[A.A.C. R18-2-306.A.4.a.iii]
4. A description of the analytical techniques or methods used;
[A.A.C. R18-2-306.A.4.a.iv]
5. The results of analyses; and
[A.A.C. R18-2-306.A.4.a.v]
6. The operating conditions as existing at the time of sampling or measurement.
[A.A.C. R18-2-306.A.4.a.vi]

B. The Permittee shall retain records of all required monitoring data and support information for a period of at least five (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 or other data recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

[A.A.C. R18-2-306.A.4.b]

XIV. REPORTING REQUIREMENTS

The Permittee shall submit the following reports:

- A.** Compliance certifications in accordance with Section VII above.
[A.A.C. R18-2-306.A.5.a]
- B.** Excess emission; permit deviation, and emergency reports in accordance with Section XII above.
[A.A.C. R18-2-306.A.5.b]
- C.** Other reports required by any condition of Attachment "B".

XV. DUTY TO PROVIDE INFORMATION

- A. The Permittee shall furnish to the Director, within a reasonable time, any information that the Director may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the Permittee shall furnish an additional copy of such records directly to the Administrator along with a claim of confidentiality.

[A.A.C. R18-2-304.G and -306.A.8.e]

- B. If the Permittee has failed to submit any relevant facts or has submitted incorrect information in the permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

[A.A.C. R18-2-304.H]

XVI. PERMIT AMENDMENT OR REVISION

The Permittee shall apply for a permit amendment or revision for changes to the facility which does not qualify for a facility change without revision under Section XVII below, as follows:

- A. Facility Changes that Require a Permit Revision - Class II (A.A.C. R18-2-317.01);
[A.A.C. R18-2-317.01]
- B. Administrative Permit Amendment (A.A.C. R18-2-318);
[A.A.C. R18-2-318]
- C. Minor Permit Revision (A.A.C. R18-2-319); and
[A.A.C. R18-2-319]
- D. Significant Permit Revision (A.A.C. R18-2-320).
[A.A.C. R18-2-320]
- E. The applicability and requirements for such action are defined in the above referenced regulations.

XVII. FACILITY CHANGE WITHOUT A PERMIT REVISION

- A. Except for a physical change or change in the method of operation at a Class II source requiring a permit revision under A.A.C. R18-2-317.01, or a change subject to logging or notice requirements in Conditions XVII.B and XVII.C, a change at a Class II source shall not be subject to revision, notice, or logging requirements under this Section.
[A.A.C. R18-2-317.02.A]
- B. Except as otherwise provided in the conditions applicable to an emissions cap created under A.A.C. R18-2-306.02, the following changes may be made if the source keeps on site records of the changes according to Appendix 3 of the Arizona Administrative Code:
[A.A.C. R18-2-317.02.B]
1. Implementing an alternative operating scenario, including raw materials changes;
 2. Changing process equipment, operating procedures, or making any other physical change if the permit requires the change to be logged;

3. Engaging in any new insignificant activity listed in A.A.C. R18-2-101.68 but not listed in the permit;
 4. Replacing an item of air pollution control equipment listed in the permit with an identical (same model, different serial number) item. The Director may require verification of efficiency of the new equipment by performance tests; and
 5. A change that results in a decrease in actual emissions if the source wants to claim credit for the decrease in determining whether the source has a net emissions increase for any purpose. The logged information shall include a description of the change that will produce the decrease in actual emissions. A decrease that has not been logged is creditable only if the decrease is quantifiable, enforceable, and otherwise qualifies as a creditable decrease.
- C. Except as provided in the conditions applicable to an emissions cap created under A.A.C. R18-2-306.02, the following changes may be made if the source provides written notice to the Department in advance of the change as provided below:
- [A.A.C. R18-2-317.02.C]
1. Replacing an item of air pollution control equipment listed in the permit with one that is not identical but that is substantially similar and has the same or better pollutant removal efficiency: 7 days. The Director may require verification of efficiency of the new equipment by performance tests;
 2. A physical change or change in the method of operation that increases actual emissions more than 10% of the major source threshold for any conventional pollutant but does not require a permit revision: 7 days;
 3. Replacing an item of air pollution control equipment listed in the permit with one that is not substantially similar but that has the same or better efficiency: 30 days. The Director may require verification of efficiency of the new equipment by performance tests;
 4. A change that would trigger an applicable requirement that already exists in the permit: 30 days unless otherwise required by the applicable requirement;
 5. A change that amounts to reconstruction of the source or an affected facility: 7 days. For the purposes of this subsection, reconstruction of a source or an affected facility shall be presumed if the fixed capital cost of the new components exceeds 50% of the fixed capital cost of a comparable entirely new source or affected facility and the changes to the components have occurred over the 12 consecutive months beginning with commencement of construction; and
 6. A change that will result in the emissions of a new regulated air pollutant above an applicable regulatory threshold but that does not trigger a new applicable requirement for that source category: 30 days. For purposes of this requirement, an applicable regulatory threshold for a conventional air pollutant shall be 10% of the applicable major source threshold for that pollutant.

- D.** For each change under Condition XVII.C, the written notice shall be by certified mail or hand delivery and shall be received by the Director the minimum amount of time in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided with less than required notice, but must be provided as far in advance of the change, or if advance notification is not practicable, as soon after the change as possible. The written notice shall include:
- [A.A.C. R18-2-317.02.D]
1. When the proposed change will occur;
 2. A description of the change;
 3. Any change in emissions of regulated air pollutants; and
 4. Any permit term or condition that is no longer applicable as a result of the change.
- E.** A source may implement any change in Condition XVII.C without the required notice by applying for a minor permit revision under A.A.C. R18-2-319.
- [A.A.C. R18-2-317.02.E]
- F.** The permit shield described in A.A.C. R18-2-325 shall not apply to any change made under this Section, other than implementation of an alternate operating scenario under Condition XVII.B.1.
- [A.A.C. R18-2-317.02.F]
- G.** Notwithstanding any other part of this Section, the Director may require a permit to be revised for any change that, when considered together with any other changes submitted by the same source under this Section over the term of the permit, constitutes a change under subsection A.A.C. R18-2-317.01.A.
- [A.A.C. R18-2-317.02.G]
- H.** If a source change is described under both Conditions XVII.B and C, the source shall comply with Condition XVII.C. If a source change is described under both Condition XVII.C and A.A.C. R18-2-317.01.B, the source shall comply with A.A.C. R18-2-317.01.B.
- [A.A.C. R18-2-317.02.H]
- I.** A copy of all logs required under Condition XVII.B shall be filed with the Director within 30 days after each anniversary of the permit issuance date. If no changes were made at the source requiring logging, a statement to that effect shall be filed instead.
- [A.A.C. R18-2-317.02.I]
- J.** Logging Requirements
- [Arizona Administrative Code, Appendix 3]
1. Each log entry required by a change under Condition XVII.B shall include at least the following information:
 - a. A description of the change, including:

- (1) A description of any process change;
 - (2) A description of any equipment change, including both old and new equipment descriptions, model numbers, and serial numbers, or any other unique equipment ID number; and
 - (3) A description of any process material change.
- b. The date and time that the change occurred.
 - c. The provision of A.A.C. R18-2-317.02.B that authorizes the change to be made with logging.
 - d. The date the entry was made and the first and last name of the person making the entry.
2. Logs shall be kept for five (5) years from the date created. Logging shall be performed in indelible ink in a bound log book with sequentially number pages, or in any other form, including electronic format, approved by the Director.

XVIII. TESTING REQUIREMENTS

- A.** The Permittee shall conduct performance tests as specified in the permit and at such other times as may be required by the Director.

[A.A.C. R18-2-312.A]

- B.** Operational Conditions during Performance Testing

Performance tests shall be conducted under such conditions as the Director shall specify to the plant operator based on representative performance of the source. The Permittee shall make available to the Director such records as may be necessary to determine the conditions of the performance tests. Operations during periods of start-up, shutdown, and malfunction (as defined in A.A.C. R18-2-101) shall not constitute representative conditions of performance tests unless otherwise specified in the applicable standard.

[A.A.C. R18-2-312.C]

- C.** Performance Tests shall be conducted and data reduced in accordance with the test methods and procedures contained in the Arizona Testing Manual unless modified by the Director pursuant to A.A.C. R18-2-312.B.

[A.A.C. R18-2-312.B]

- D.** Test Plan

At least 14 working days prior to performing a test, the Permittee shall submit a test plan to the Director, which must include the following, in addition to all other applicable requirements, as identified in the Arizona Testing Manual:

[A.A.C. R18-2-312.B]

1. Test duration;
2. Test location(s);

3. Test method(s); and
4. Source operation and other parameters that may affect test results.

E. Stack Sampling Facilities

The Permittee shall provide, or cause to be provided, performance testing facilities as follows:

[A.A.C. R18-2-312.E]

1. Sampling ports adequate for test methods applicable to the facility;
2. Safe sampling platform(s);
3. Safe access to sampling platform(s); and
4. Utilities for sampling and testing equipment.

F. Interpretation of Final Results

Each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic mean of the results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs is required to be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the Permittee's control, compliance may, upon the Director's approval, be determined using the arithmetic mean of the results of the other two runs. If the Director or the Director's designee is present, tests may only be stopped with the Director's or such designee's approval. If the Director or the Director's designee is not present, tests may only be stopped for good cause. Good cause includes: forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the Permittee's control. Termination of any test without good cause after the first run is commenced shall constitute a failure of the test. Supporting documentation, which demonstrates good cause, must be submitted.

[A.A.C. R18-2-306.A.3.c and A.A.C. R18-2-312.F]

G. Report of Final Test Results

A written report of the results of performance tests conducted pursuant to 40 CFR 63, shall be submitted to the Director within 60 days after the test is performed. A written report of the results of all other performance tests shall be submitted within 4 weeks after the completion of the testing as specified in the Arizona Testing Manual. All performance testing reports shall be submitted in accordance with the Arizona Testing Manual and A.A.C. R18-2-312.A.

[A.A.C. R18-2-312.A and B]

H. Extension of Performance Test Deadline

For performance testing required under Condition XVIII.A above, the Permittee may request an extension to a performance test deadline due to a force majeure event as follows:

[A.A.C. R18-2-312.J]

1. If a force majeure event is about to occur, occurs, or has occurred for which the Permittee intends to assert a claim of force majeure, the Permittee shall notify the Director in writing as soon as practicable following the date the Permittee first knew, or through due diligence should have known that the event may cause or caused a delay in testing beyond the regulatory deadline. The notification must occur before the performance test deadline unless the initial force majeure or a subsequent force majeure event delays the notice, and in such cases, the notification shall be given as soon as practicable.

[A.A.C. R18-2-312.J.1]

2. The Permittee shall provide to the Director a written description of the force majeure event and a rationale for attributing the delay in testing beyond the regulatory deadline to the force majeure; describe the measures taken or to be taken to minimize the delay; and identify a date by which the Permittee proposes to conduct the performance test. The performance test shall be conducted as soon as practicable after the force majeure event occurs.

[A.A.C. R18-2-312.J.2]

3. The decision as to whether or not to grant an extension to the performance test deadline is solely within the discretion of the Director. The Director shall notify the Permittee in writing of approval or disapproval of the request for an extension as soon as practicable.

[A.A.C. R18-2-312.J.3]

4. Until an extension of the performance test deadline has been approved by the Director under Conditions XVIII.H.1, 2, and 3 above, the Permittee remains subject to the requirements of Section XVIII.

[A.A.C. R18-2-312.J.4]

5. For purposes of this Section XVIII, a “force majeure event” means an event that will be or has been caused by circumstances beyond the control of the Permittee, its contractors, or any entity controlled by the Permittee that prevents it from complying with the regulatory requirement to conduct performance tests within the specified timeframe despite the Permittee's best efforts to fulfill the obligation. Examples of such events are acts of nature, acts of war or terrorism, or equipment failure or safety hazard beyond the control of the Permittee.

[A.A.C. R18-2-312.J.5]

XIX. PROPERTY RIGHTS

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

[A.A.C. R18-2-306.A.8.d]

XX. SEVERABILITY CLAUSE

The provisions of this permit are severable. In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force.

[A.A.C. R18-2-306.A.7]

XXI. PERMIT SHIELD

Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements identified in the portions of this permit subtitled "Permit Shield". The permit shield shall not apply to minor revisions pursuant to Condition XVI.C of this Attachment and any facility changes without a permit revision pursuant to Section XVII of this Attachment.

[A.A.C. R18-2-317.F, - 320, and -325]

XXII. PROTECTION OF STRATOSPHERIC OZONE

If this source becomes subject to the provisions of 40 CFR Part 82, then the Permittee shall comply with these provisions accordingly.

[40 CFR Part 82]

XXIII. APPLICABILITY OF NSPS/NESHAP GENERAL PROVISIONS

For all equipment subject to a New Source Performance Standard or a National Emission Standard for Hazardous Air Pollutants, the Permittee shall comply with all applicable requirements contained in Subpart A of Title 40, Chapter 60 and Chapter 63 of the Code of Federal Regulation.

[40 CFR Part 60 Subpart A and Part 63 Subpart A]

ATTACHMENT “B”: SPECIFIC CONDITIONS

I. FACILITY-WIDE REQUIREMENTS

A. Operating Limitations

The Permittee shall operate and maintain all air pollution control equipment and fuel combustion equipment identified in Attachment “C” in accordance with manufacturer-supplied operations and maintenance instructions, except as specifically permitted by other conditions in Attachment “B.” If manufacturer-supplied operations and maintenance instructions are: (1) not available; (2) not applicable; or (3) at the Permittee’s election (with approval by the Director), the Permittee shall prepare an Operation and Maintenance Plan, which provides adequate information to properly operate and maintain the equipment. The Permittee shall operate and maintain the equipment in accordance with any such Operation and Maintenance Plan prepared by the Permittee.

[A.A.C. R18-2-306.A.2]

B. Recordkeeping and Reporting Requirements

1. The Permittee shall maintain, on-site, records of the manufacturer-supplied operations and maintenance instructions and/or the Operation and Maintenance Plan required by Condition I.A above.

[A.A.C. R18-2-306.A.3.c]

2. The Permittee shall submit reports of all monitoring activities required in this Attachment “B” at the time the compliance certifications required by Section VII of Attachment “A” are submitted. The Permittee may submit the report of monitoring activities via the “Annual/Semiannual Deviation and Monitoring Report” form located on the Arizona Department of Environmental Quality Website.

[A.A.C. R18-2-306.A.5.a]

3. Deviations from the following Attachment “B” permit conditions shall be promptly reported in accordance with Condition XII.B.2 of Attachment “A”:

[A.A.C. R18-2-306.A.5.b.ii]

- a. Condition II.A.3.b below;
- b. Condition II.B.4 below;
- c. Condition II.D.1.c(1) below;
- d. Condition II.D.2.c below;
- e. Condition III.A.4.b below; and
- f. Condition III.A.4.c below.

C. Periodic Opacity Monitoring Requirements

1. The Permittee shall have on site or on call a person certified in EPA Reference Method 9.

[A.A.C. R18-2-306.A.2]
2. The Permittee shall use the following methodology to periodically monitor opacity. The periodic opacity monitoring shall be conducted as required and according to the frequency specified in later Attachment "B" permit conditions:

[A.A.C. R18-2-306.A.3.c]

 - a. The Certified EPA Reference Method 9 observer shall conduct, surveys of visible emissions from all the emission units identified in the following sections, when in operation, unless specified otherwise. An emission unit shall include, stack, fugitive, and non-point/non-fugitive emission sources.
 - b. If the observer, during the visual survey, does not see visible emissions that on an instantaneous basis appears to exceed the applicable opacity standard, then the observer shall keep a record of the name of the observer, the date on which the observation was made, and the results of the observation.
 - c. If the observer sees visible emissions that on an instantaneous basis appears to exceed the applicable opacity standard, then the observer shall, if practicable, take a six-minute EPA Reference Method 9 observation of the visible emissions.
 - d. If the six-minute opacity of the visible emissions is less than or equal to the opacity standard, the observer shall make a record of the following:
 - (1) Location, date, and time of the test; and
 - (2) The results of the EPA Reference Method 9 observation.
 - e. If the six-minute opacity of the visible emissions exceeds the opacity standard, then the Permittee shall do the following:
 - (1) Adjust or repair the controls or equipment to reduce opacity to or below the opacity standard; and
 - (2) Report the event as an excess emission for opacity.
3. If emissions from the emission unit are controlled by a pollution control device, periodic opacity monitoring shall be conducted at the exhaust location. If emissions are released inside a building, periodic opacity monitoring shall be conducted on the overall building or at the location where emissions exit the building.

[A.A.C. R18-2-306.A.3.c]

II. METALLIC MINERAL PROCESSING OPERATIONS

This Section applies to equipment and operations associated with metallic mineral processing operations.

A. Facilities Subject to the Standards of Performance for Existing Nonferrous Metals Industry Sources Under A.A.C. R18-2-721

1. Applicability

The facilities subject to the requirements of this Condition II.A are identified in the last column of the Equipment List in Attachment “C.”

2. Emission Limitations and Standards

a. Particulate Matter

- (1) The Permittee shall not cause, allow, or permit the discharge of particulate matter into the atmosphere in any one hour from any process source in total quantities in excess of the amounts calculated by one of the following equations:

[A.A.C. R18-2-721.B]

- (a) For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

$$E = 4.10P^{0.67}$$

Where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour; and

P = the process weight rate in tons-mass per hour.

- (b) For process sources having a process weight greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

$$E = 55.0P^{0.11} - 40$$

Where “E” and “P” are defined as indicated in Condition II.A.2.a(1)(a) above.

- (2) For purposes of Condition II.A.2.a(1) above, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

[A.A.C. R18-2-721.D]

b. Opacity

- (1) The opacity of any plume or effluent from any existing, stationary, point source shall not be greater than 20%.

[A.A.C. R18-2-702.B.3]

- (2) If the presence of uncombined water is the only reason for an exceedance of the visible emissions requirement in Condition II.A.2.b(1) above, the exceedance shall not constitute a violation of the applicable opacity limit.

[A.A.C. R18-2-702.C]

3. Air Pollution Prevention and Control Requirements

- a. When necessary, the Permittee shall, to the extent practicable, utilize wet suppression on the following emission units to minimize particulate matter emissions and comply with the applicable emission limitations and standards of Condition II.A.2 above. Wet suppression options include water sprays, surfactant use, water jets, foggers, inherent moisture content (including moisture from upstream water sprays), or other equivalent control methods.

[A.A.C. R18-2-306.A.2]

- (1) Unloading Ore to Primary Crusher 1 (Process #001-6);
- (2) Unloading Ore to Primary Crusher 2 (Process #001-7);
- (3) Overland Conveyor 2 to Overland Conveyor 3 (Process #001-11);
- (4) Overland Conveyor 4 to Radial Stacker 5 (Process #001-9);
- (5) Radial Stacker 5 to Coarse Ore Stockpiles 1/4 (Process #001-4);
- (6) Radial Stacker 5 to Free-Standing Stacker 6 (Process #001-10);
and
- (7) Free-Standing Stacker 6 to Coarse Ore Stockpile 5 (Process #001-3).

- b. *At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate Scrubber C18 (Process #001-1 prior to reconstruction of Primary Crusher 1) in a manner consistent with good air pollution control practices for minimizing particulate matter emissions.*

[A.A.C. R18-2-306.A.2 and -331.A.3.e]

[Material permit conditions are indicated by underline and italics]

4. Monitoring, Recordkeeping, and Reporting Requirements

- a. The Permittee shall record the daily process rates and hours of operation of all material handling facilities.

[A.A.C. R18-2-721.F]

- b. Except for the PC1 Rock Breaker (2110-RKB-0021) and the Rock Breaker (RB), the Permittee shall conduct the periodic opacity monitoring method specified in Condition I.C above on a monthly basis for all emission units subject to Condition II.A. The periodic opacity monitoring for 2110-RKB-0021 and RB is satisfied by the periodic opacity monitoring required by Condition II.B.5.g for Primary Crusher 1 (2110-CRG-0021) and Primary Crusher 2 (PC2), respectively.

[A.A.C. R18-2-306.A.3.c]

5. Permit Shield

Compliance with the requirements of Condition II.A shall be deemed compliance with A.A.C. R18-2-702.B.3, 702.C, 721.B, 721.D, and 721.F.

[A.A.C. R18-2-325]

B. Facilities Subject to the NSPS Requirements for Metallic Mineral Processing Plant Affected Facilities Under 40 CFR 60 Subpart LL

1. Applicability

The facilities subject to the requirements of this Condition II.B are identified in the last column of the Equipment List in Attachment “C.”

2. Emission Limitations and Standards

a. Particulate Matter

On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, the Permittee shall not cause to be discharged into the atmosphere from an affected facility any stack emissions that contain particulate matter in excess of 0.05 grams per dry standard cubic meter (0.05 g/dscm).

[40 CFR 60.382(a)(1)]

b. Opacity

- (1) *On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, the Permittee shall not cause to be discharged into the atmosphere from an affected facility any stack emissions that exhibit greater than 7% opacity, unless the stack emissions are discharged from an affected facility using a wet scrubbing emission control device.*

[40 CFR 60.382(a)(2) A.A.C. R18-2-331.A.3.f]

[Material permit conditions are indicated by underline and italics]

- (2) *On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup, the Permittee shall not cause to be discharged into the atmosphere from an affected facility any process fugitive emissions that exhibit greater than 10% opacity.*

[40 CFR 60.382(b) A.A.C. R18-2-331.A.3.f]

[Material permit conditions are indicated by underline and italics]

3. Operational Limitations

At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[40 CFR 60.11(d)]

4. Air Pollution Control Requirements

At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the following pollution control devices in a manner consistent with good air pollution control practices for minimizing particulate matter emissions.

[A.A.C. R18-2-306.A.2 and -331.A.3.e]

[Material permit conditions are indicated by underline and italics]

- a. Scrubber C18 (Process #001-1 following reconstruction of Primary Crusher 1);
- b. Dust Collector C51 (Process #001-5);
- c. GL1 Dust Collector C1 (Process #002-1);
- d. GL2 Dust Collector C2 (Process #002-2);
- e. GL3 Dust Collector DC3 (Process #002-3);
- f. GL4 Dust Collector DC4 (Process #02-4);
- g. GL5 Dust Collector DC5 (Process #002-6);
- h. Filtered Concentrate Dust Collector CuDC (Process #006-9);
- i. Venturi Scrubber or Venturi Scrubber (alternate) (Process #047-5);
- j. Molybdenum Concentrate Dust Collector 1 (Process #047-10); and
- k. Molybdenum Concentrate Dust Collector 2 (Process #047-13).

5. Monitoring, Recordkeeping, and Reporting Requirements

- a. The Permittee shall calibrate, maintain, and operate a monitoring device for the continuous measurement of the change in pressure of the gas

stream through the scrubber for any affected facility using a wet scrubbing emission control device. The monitoring device must be certified by the manufacturer to be accurate within ± 250 pascals (± 1 inch water) gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions.

[40 CFR 60.384(a), A.A.C. R18-2-331.A.3.c]

[Material permit conditions are indicated by underline and italics]

- b. The Permittee shall calibrate, maintain, and operate a monitoring device for the continuous measurement of the scrubbing liquid flow rate to a wet scrubber for any affected facility using any type of wet scrubbing emission control device. The monitoring device must be certified by the manufacturer to be accurate within $\pm 5\%$ of design scrubbing liquid flow rate and must be calibrated on at least an annual basis in accordance with manufacturer's instructions.

[40 CFR 60.384(b), A.A.C. R18-2-331.A.3.c]

[Material permit conditions are indicated by underline and italics]

- c. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments, the monitoring devices in Condition II.B.5.a and Condition II.B.5.b shall be in continuous operation whenever the scrubbers are operating. The monitoring devices shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

[A.A.C. R18-2-306.A.3.c]

- d. During the initial performance test of a wet scrubber, and at least weekly thereafter, the Permittee shall record the measurements of both the change in pressure of the gas stream across the scrubber and the scrubbing liquid flow rate.

[40 CFR 60.385(b)]

- e. After the initial performance test of a wet scrubber, the Permittee shall submit semiannual reports to the Director of occurrences when the measurements of the scrubber pressure loss (or gain) or liquid flow rate differ by more than $\pm 30\%$ from the average obtained during the most recent performance test.

[40 CFR 60.385(c)]

- f. The reports required under Condition II.B.5.e shall be postmarked within 30 days following the end of the second and fourth calendar quarters.

[40 CFR 60.385(d)]

- g. The Permittee shall conduct the periodic opacity monitoring method specified in Condition I.C above on a monthly basis for all emission units subject to an opacity standard in Condition II.B.

[A.A.C. R18-2-306.A.3.c]

6. Performance Testing Requirements

- a. Initial Performance Test

- (1) The Permittee shall conduct initial performance tests for all new affected facilities as specified in Condition II.B.6.a(2) through Condition II.B.6.a(6) below.

[40 CFR 60.8, 60.11]
- (2) For the purpose of demonstrating initial compliance with Condition II.B.2.a, the Permittee shall conduct a performance test and submit to the Director a written report of the results of the test as specified in 40 CFR 60.8(a).

[40 CFR 60.8, 60.385(a)]
- (3) For the purpose of demonstrating initial compliance with Condition II.B.2.b(1), opacity observations shall be conducted concurrently with the performance tests required in Condition II.B.6.a(2) except as allowed in 40 CFR 60.11(e)(1). The minimum total time of observations shall be 3 hours (30 6-minute averages). The Permittee shall report to the Director the opacity results along with the results of the initial performance test required by Condition II.B.6.a(2).

[40 CFR 60.11]
- (4) For the purpose of demonstrating initial compliance with Condition II.B.2.b(2), opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. The minimum total time of observations shall be 3 hours (30 6-minute averages). The Permittee shall report to the Director the opacity results as specified in 40 CFR 60.8(a).

[40 CFR 60.8, 60.11]
- (5) In conducting the performance tests required in 40 CFR 60.8, the Permittee shall use as reference methods and procedures the test methods in Appendix A of 40 CFR 60 or other methods and procedures as specified in 40 CFR 60 Subpart LL, except as provided in 40 CFR 60.8(b).

[40 CFR 60.386(a)]
- (6) The Permittee shall determine compliance with the particulate matter standards in Condition II.B.2 as follows:

[40 CFR 60.386(b)]

 - (a) Method 5 or 17 shall be used to determine the particulate matter concentration. The sample volume for each run shall be at least 1.70 dscm (60 dscf). The sampling probe and filter holder of Method 5 may be operated without heaters if the gas stream being sampled is at ambient temperature. For gas streams above ambient temperature, the Method 5 sampling train shall be operated with a probe and filter temperature slightly above the effluent temperature (up to a maximum filter temperature of 121

°C (250 °F)) in order to prevent water condensation on the filter.

(b) Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity from stack emissions and process fugitive emissions. The observer shall read opacity only when emissions are clearly identified as emanating solely from the affected facility being observed. A single visible emission observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval. This option is subject to the following limitations:

(i) No more than three emission points are read concurrently;

(ii) All three emission points must be within a 70° viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points; and

(iii) If an opacity reading for any one of the three emission points is within 5 percent opacity of the application standard, then the observer must stop taking readings for the other two points and continue reading just that single point.

b. To demonstrate continued compliance with the emission limitation in Condition II.B.2.a, the Permittee shall conduct the performance tests required by Condition II.C.3 below.

[A.A.C. R18-2-306.A.3.c and -312]

c. To comply with Condition II.B.5.e, the Permittee shall use the monitoring devices in Condition II.B.5.a and Condition II.B.5.b to determine the pressure loss of the gas stream through the scrubber and scrubbing liquid flow rate at any time during each particulate matter performance test run, and the average of the three determinations shall be computed.

[40 CFR 60.386(c)]

7. Permit Shield

Compliance with the requirements of Condition II.B shall be deemed compliance with 40 CFR 60.8, 60.11, 60.382(a)(1), 60.382(a)(2), 60.382(b), 60.384(a), 60.384(b), 60.385(a), 60.385(b), 60.385(c), 60.385(d), 60.386(a), 60.386(b), and 60.386(c).

[A.A.C. R18-2-325]

C. Voluntary Emission Limitations

1. Applicability

The facilities subject to the requirements of this Condition II.C are identified in the last column of the Equipment List in Attachment "C."

2. Emission Limitations and Standards

a. *The Permittee shall not allow the emissions of PM and PM₁₀ from the processes identified in Section A of the table in Attachment "D" to exceed 0.0135 gr/dscf, as measured at the emission exhaust point to the atmosphere.*

[A.A.C. R 18-2-306.01.A and -331.A.3.a]

[Material permit conditions are indicated by underline and italics]

b. *The Permittee shall not allow the emissions of PM and PM₁₀ from the processes identified in Section B of the table in Attachment "D" to exceed 0.0124 gr/dscf, as measured at the emission exhaust point to the atmosphere.*

[A.A.C. R 18-2-306.01.A and -331.A.3.a]

[Material permit conditions are indicated by underline and italics]

c. *The Permittee shall not allow the emissions of PM and PM₁₀ from the processes identified in Section C of the table in Attachment "D" to exceed 0.0085 gr/dscf, as measured at the emission exhaust point to the atmosphere.*

[A.A.C. R 18-2-306.01.A and -331.A.3.a]

[Material permit conditions are indicated by underline and italics]

d. *The Permittee shall not allow the emissions of PM and PM₁₀ from the processes identified in Section D of the table in Attachment "D" to exceed 0.004 gr/dscf, as measured at the emission exhaust point to the atmosphere.*

[A.A.C. R 18-2-306.01.A and -331.A.3.a]

[Material permit conditions are indicated by underline and italics]

e. *The Permittee shall not allow the emissions of PM and PM₁₀ from the processes identified in Section E of the table in Attachment "D" to exceed 0.003 gr/dscf, as measured at the emission exhaust point to the atmosphere.*

[A.A.C. R 18-2-306.01.A and -331.A.3.a]

[Material permit conditions are indicated by underline and italics]

f. *The Permittee shall not allow the emissions of PM and PM₁₀ from the processes identified in Section F of the table in Attachment "D" to exceed 0.0023 gr/dscf, as measured at the emission exhaust point to the atmosphere.*

[A.A.C. R18-2-306.01. A and -331. A.3.a]

[Material permit conditions are indicated by underline and italics]

g. *The Permittee shall not allow the emissions of PM and PM₁₀ from the processes identified in Section G of the table in Attachment "D" to exceed 0.002 gr/dscf, as measured at the emission exhaust point to the atmosphere.*

[A.A.C. R 18-2-306.01.A and -331.A.3.a]

[Material permit conditions are indicated by underline and italics]

- h. *The Permittee shall not allow the emissions of PM and PM₁₀ from the processes identified in Section H of the table in Attachment "D" to exceed 0.001 gr/dscf, as measured at the emission exhaust point to the atmosphere.*

[A.A.C. R 18-2-306.01.A and -331.A.3.a]

[Material permit conditions are indicated by underline and italics]

3. Performance Testing Requirements

- a. The Permittee shall within 60 days of achieving the maximum production rate, but no later than 180 days of the restart of Primary Crusher 1 (PC1) under the Primary Operating Scenario or the initial startup of the pollution control devices listed in Condition II.C.3.a(2) through (14) below, conduct performance tests for PM₁₀ and PM on the stacks of the following pollution control devices to demonstrate compliance with the emission limitations in Condition II.B.2.a and/or Condition II.C.2 above (as applicable).

[A.A.C. R18-2-306.A.3.c and -312]

- (1) Scrubber C18 (Process #001-1);
- (2) GL5 Dust Collector DC5 (Process #002-6);
- (3) PC1 Dust Collector 1 (AOS1) (Process #001-12 (AOS1));
- (4) Dust Collector C51 (AOS1) (Process #001-5 (AOS1));
- (5) PC1 CCC1 Dust Collector 2 (AOS1) (Process #001-13 (AOS1));
- (6) PC1 CCC2 Dust Collector 3 (AOS1) (Process #001-14 (AOS1));
- (7) PC1 CCC3 Dust Collector 4 (AOS1) (Process #001-15 (AOS1));
- (8) Coarse Ore Reclaim Conveyor 1 Dust Collector 5 (AOS1) (Process #002-7 (AOS1));
- (9) Coarse Ore Reclaim Conveyor 2 Dust Collector 6 (AOS1) (Process #002-8 (AOS1));
- (10) HPGR Discharge Dust Collector 7 (AOS1) (Process #002-9 (AOS1));
- (11) HPGR Discharge Conveyor Transfer Dust Collector 8 (AOS1) (Process #002-10 (AOS1));
- (12) HPGR Product Bin Dust Collector 9 (AOS1) (Process #002-11 (AOS1));
- (13) HPGR Product Transfer Dust Collector 10 (AOS1) (Process #002-12 (AOS1)); and

(14) HPGR Product Transfer Dust Collector 11 (AOS1) (Process #002-13 (AOS1)).

b. For the following processes that are operational and have been tested previously, the Permittee shall conduct performance tests for PM and PM₁₀ on the stacks of the associated pollution control devices a minimum of once during the permit term to demonstrate compliance with the emission limits in Condition II.B.2.a and/or Condition II.C.2 above (as applicable).

[A.A.C. R18-2-306.A.3.c and -312]

(1) Dust Collector C51 (Process #001-5);

(2) GL1 Dust Collector C1 (Process #002-1);

If the Permittee operates under AOS3 within the first three years of the permit term, the testing required by Condition II.B.6.a following replacement of GL1 Secondary Crusher can be used to meet this requirement if all particulate matter measured by EPA Reference Method 5 in 40 CFR 60, Appendix A is considered to have an aerodynamic diameter less than 10 microns or EPA Reference Method 201 or 201A and (if necessary) Method 202 specified in 40 CFR 51, Appendix M is used to determine emissions of PM₁₀.

(3) GL2 Dust Collector C2 (Process #002-2);

If the Permittee operates under AOS3 within the first three years of the permit term, the testing required by Condition II.B.6.a following replacement of GL2 Secondary Crusher can be used to meet this requirement if all particulate matter measured by EPA Reference Method 5 in 40 CFR 60, Appendix A is considered to have an aerodynamic diameter less than 10 microns or EPA Reference Method 201 or 201A and (if necessary) Method 202 specified in 40 CFR 51, Appendix M is used to determine emissions of PM₁₀.

(4) GL3 Dust Collector DC3 (Process #002-3);

If the Permittee operates under AOS3 within the first three years of the permit term, the testing required by Condition II.B.6.a following replacement of GL3 Secondary Crusher can be used to meet this requirement if all particulate matter measured by EPA Reference Method 5 in 40 CFR 60, Appendix A is considered to have an aerodynamic diameter less than 10 microns or EPA Reference Method 201 or 201A and (if necessary) Method 202 specified in 40 CFR 51, Appendix M is used to determine emissions of PM₁₀.

(5) GL4 Dust Collector DC4 (Process #002-4);

If the Permittee operates under AOS3 within the first three years of the permit term, the testing required by Condition II.B.6.a following replacement of GL4 Secondary Crusher can be used to meet this requirement if all particulate matter measured by EPA Reference Method 5 in 40 CFR 60, Appendix A is considered to have an aerodynamic diameter less than 10 microns or EPA Reference Method 201 or 201A and (if necessary) Method 202 specified in 40 CFR 51, Appendix M is used to determine emissions of PM₁₀.

(6) Filtered Concentrate Dust Collector CuDC (Process #006-9);

- c. If the result of a performance test on the stack of a pollution control device listed in Condition II.C.3.a(1) through Condition II.C.3.a(14) is less than or equal to 35% of the applicable emission limitations in Condition II.C.2 above, the Permittee shall conduct a subsequent performance test for PM₁₀ and PM on the stack of that pollution control device within two years (between 22 and 26 months from the date of the previous test) during the permit term.

[A.A.C. R18-2-306.A.3.c and -312]

- d. If the result of a performance test on the stack of a pollution control device listed in Condition II.C.3.a(1) through Condition II.C.3.a(14) is greater than 35% of the applicable emission limitations in Condition II.C.2 above, the Permittee shall conduct a subsequent performance test for PM₁₀ and PM on the stack of that pollution control device on an annual basis (between 11 and 13 months from the date of the previous test) until it is less than or equal to 35% of the applicable emission limitations in Condition II.C.2 above.

[A.A.C. R18-2-306.A.3.c and -312]

- e. If the result of any performance test required by Condition II.C.3.b above is less than or equal to 70% of the applicable emission limits in Condition II.C.2 above, no further testing is required for that control device during the permit term.

[A.A.C. R18-2-306.A.3.c and -312]

- f. If the result of any performance test required by Condition II.C.3.b above is greater than 70% of the applicable emission limits in Condition II.C.2 above, the Permittee shall conduct subsequent performance test(s) for PM and PM₁₀ on the stack of that pollution control device on an annual basis (between 11 and 13 months from the date of the previous test) until it is less than or equal to 70% of the applicable emission limitations in Condition II.C.2 above.

[A.A.C. R18-2-306.A.3.c and -312]

- g. If the result of any subsequent performance test required by Condition II.C.3.f above is less than or equal to 70% of the applicable emission limits in Condition II.C.2 above, no further testing is required for that control device during the permit term.

[A.A.C. R18-2-306.A.3.c and -312]

- h. EPA Reference Method 5 in 40 CFR 60, Appendix A and (if necessary) EPA Reference Method 202 specified in 40 CFR 51, Appendix M shall be used to determine emissions of PM. All particulate matter measured by the above reference method can be considered to have an aerodynamic diameter less than 10 microns or EPA Reference Method 201 or 201A and (if necessary) Method 202 specified in 40 CFR 51, Appendix M can be used to determine emissions of PM₁₀.

[A.A.C. R18-2-306.A.3.c and -312]

D. Alternate Operating Scenarios

This Section applies to equipment and operations specific to alternate operating scenarios.

1. Alternate Operating Scenario 1 (AOS1) - Two Concentrator Operations

a. Applicability

The equipment and operations subject to the requirements of this Condition II.D.1 are identified in the last column of the Equipment List in Attachment "C."

b. Operational Limitations

- (1) When operating under AOS1, the Permittee may operate the modified primary crushing and overland conveying operations, Second Concentrator milling operations, Second Concentrator bulk and molybdenum flotation operations, Second Concentrator concentrate handling operations, Second Concentrator lime and other reagent operations, Second Concentrator prill handling operations, and Second Concentrator emergency ICE using the equipment identified in the section titled "AOS1: Two Concentrator Operations" in the Equipment List of Attachment "C."

[A.A.C. R18-2-306.A.11]

- (2) When operating under AOS1, the Permittee shall not operate the equipment identified in the section titled "Primary Crushing and Overland Conveying Operations" in the Equipment List of Attachment "C" except for the following equipment that is common to both the primary operating scenario and AOS1:

[A.A.C. R18-2-306.A.11]

- (a) Primary Crusher 1 (PC1);
- (b) Rock Breaker (RB);
- (c) Primary Crusher 2 (PC2);
- (d) Dust Collector C51 (C51);
- (e) PC2 Surge Bin (PC2SB);

- (f) PC2 Apron Feeder (PC2AF);
- (g) PC2 Dribble Conveyor (PC2DC);
- (h) Overland Conveyor 3A (OC3A);
- (i) Overland Conveyor 3 (OC3);
- (j) Overland Conveyor 4 (OC4);
- (k) Radial Stacker 5 (RST5); and
- (l) Free-Standing Stacker 6 (FSS6).

c. Air Pollution Prevention and Control Requirements

- (1) *At all times when operating under AOS1, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, install, maintain, and operate the following pollution control devices in a manner consistent with good air pollution control practices for minimizing particulate matter emissions.*

[A.A.C. R18-2-306.A.2 and -331.A.3.d, e]

[Material permit conditions are indicated by underline and italics]

- (a) *PC1 Dust Collector 1 (AOS1) (Process #001-12 (AOS1));*
- (b) *Dust Collector C51 (AOS1) (Process #001-5 (AOS1));*
- (c) *PC1 CCC1 Dust Collector 2 (AOS1) (Process #001-13 (AOS1));*
- (d) *PC1 CCC2 Dust Collector 3 (AOS1) (Process #001-14 (AOS1));*
- (e) *PC1 CCC3 Dust Collector 4 (AOS1) (Process #001-15 (AOS1));*
- (f) *Coarse Ore Reclaim Conveyor 1 Dust Collector 5 (AOS1) (Process #002-7 (AOS1));*
- (g) *Coarse Ore Reclaim Conveyor 2 Dust Collector 6 (AOS1) (Process #002-8 (AOS1));*
- (h) *HPGR Discharge Dust Collector 7 (AOS1) (Process #002-9 (AOS1));*
- (i) *HPGR Discharge Conveyor Transfer Dust Collector 8 (AOS1) (Process #002-10 (AOS1));*

- (j) HPGR Product Bin Dust Collector 9 (AOS1) (Process #002-11 (AOS1));
 - (k) HPGR Product Transfer Dust Collector 10 (AOS1) (Process #002-12 (AOS1));
 - (l) HPGR Product Transfer Dust Collector 11 (AOS1) (Process #002-13 (AOS1)); and
 - (m) Molybdenum Dryer Wet Scrubber System (AOS1) (Process #052-2 (AOS1)).
- (2) As necessary when operating under AOS1, the Permittee shall, to the extent practicable, utilize wet suppression on the following emission units to minimize particulate matter emissions and comply with the applicable emission limitations and standards of Condition II.A.2 above. Wet suppression options include water sprays, surfactant use, water jets, foggers, inherent moisture content (including moisture from upstream water sprays), or other equivalent control methods.
- [A.A.C. R18-2-306.A.2]
- (a) Unloading Ore to Primary Crusher 1 (AOS1) (Process #001-6 (AOS1));
 - (b) Unloading Ore to Primary Crusher 2 (AOS1) (Process #001-7 (AOS1))
 - (c) Radial Stacker 5 (AOS1) to Coarse Ore Stockpiles 1/4 (Process #001-4 (AOS1));
 - (d) Radial Stacker 5 (AOS1) to Free-Standing Stacker 6 (AOS1) (Process #001-10 (AOS1));
 - (e) Free-Standing Stacker 6 (AOS1) to Coarse Ore Stockpile 5 (Process #001-3 (AOS1)); and
 - (f) PC1 Cross Country Conveyor 3 (AOS1) to Coarse Ore Stockpile 6 (Process #001-20 (AOS1)).
- (3) At all times when operating under AOS1, the Permittee shall, to the extent practicable, install, maintain, and operate wet suppression on the following emission units to minimize particulate matter emissions and comply with the applicable emission limitations and standards of Condition II.A.2 above. Wet suppression options include water sprays, surfactant use, water jets, foggers, inherent moisture content (including moisture from upstream water sprays), or other equivalent control methods.

[A.A.C. R 18-2-306.01.A and -331.A.3.a]

[Material permit conditions are indicated by underline and italics]

- (a) Overland Conveyor 3A (AOS1) to Overland Conveyor 3 (AOS1) (Process #001-2 (AOS1));
 - (b) Overland Conveyor 3 (AOS1) to Overland Conveyor 4 (AOS1) (Process #001-8 (AOS1)); and
 - (c) Overland Conveyor 4 (AOS1) to Radial Stacker 5 (AOS1) (Process #001-9 (AOS1)).
- (4) At all times when operating under AOS1, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the Second Concentrator Lime Silo Baghouse (AOS1) on the Second Concentrator Lime Silo (AOS1) (Process #007-6) to minimize particulate matter emissions and comply with applicable emission limitations and standards of Condition III.A.2 below.
[A.A.C. R18-2-306.A.2]
- (5) At all times when operating under AOS1, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the Second Concentrator Lime System Scrubber (AOS1) on the Second Concentrator Lime Slaker (AOS1) (Process #007-7) to minimize particulate matter emissions and comply with applicable emission limitations and standards of Condition III.A.2 below.
[A.A.C. R18-2-306.A.2]
- (6) At all times when operating under AOS1, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the Second Concentrator NaHS System Scrubber (AOS1) to minimize hydrogen sulfide emissions from the NaHS Storage Tank (AOS1) and NaHS Distribution Tank (AOS1) (Process #055-3 (AOS1)) to comply with the applicable emission limitations and standards of Condition III.A.3 below.
[A.A.C. R18-2-306.A.2]
- d. The AOS1 operations shall comply with all the requirements in Condition II.A, Condition II.B, Condition II.C, Condition III.A, Condition IV.B, Condition V.B, and Condition VI.E, as applicable.
[A.A.C. R18-2-306.A.11.c]
- e. **Monitoring, Recordkeeping, and Reporting Requirements**
- The Permittee shall, contemporaneously with making the change from one operating scenario to another, record in a log a record of the scenario under which it is operating.
[A.A.C. R18-2-306.A.11.a]
2. **Alternate Operating Scenario 3 (AOS3) - Upgrades to Milling Operations**

a. Applicability

The equipment and operations subject to the requirements of this Condition II.D.2 are identified in the last column of the Equipment List in Attachment "C."

b. Operational Limitations

(1) When operating Under AOS3, the Permittee may operate:

[A.A.C. R18-2-306.A.11]

(a) GL1 through GL5 Belt Conveyors B (48" belt width); and

(b) GL1 through GL5 Secondary Crushers (Metso MP1250).

(2) When operating Under AOS3, the Permittee shall not operate:

[A.A.C. R18-2-306.A.11]

(a) GL1 through GL5 Belt Conveyors B (40" belt width); and

(b) GL1 through GL5 Secondary Crushers (Metso MP800).

c. Air Pollution Control Requirements

At all times when operating under AOS3, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the following pollution control devices in a manner consistent with good air pollution control practices for minimizing particulate matter emissions.

[A.A.C. R18-2-306.A.2 and -331.A.3.e]

[Material permit conditions are indicated by underline and italics]

(1) *GL1 Dust Collector C1 (Process #002-1);*

(2) *GL2 Dust Collector C2 (Process #002-2);*

(3) *GL3 Dust Collector DC3 (Process #002-3);*

(4) *GL4 Dust Collector DC4 (Process #002-4); and*

(5) *GL5 Dust Collector DC5 (Process #002-6).*

d. The AOS3 operations shall comply with all the requirements in Condition II.A, Condition II.B, and Condition II.C, as applicable.

[A.A.C. R18-2-306.A.11.c]

e. Monitoring, Recordkeeping, and Reporting Requirements

The Permittee shall, contemporaneously with making the change from one operating scenario to another, record in a log a record of the scenario under which it is operating.

[A.A.C. R18-2-306.A.11.a]

3. Alternate Operating Scenario 5 (AOS5) – Emergency Grizzly Systems

a. Applicability

The equipment and operations subject to the requirements of this Condition II.D.3 are identified in the last column of the Equipment List in Attachment “C.”

b. Operational Limitations

(1) The Permittee may operate the Emergency Grizzly Systems (Process #s 048-1 through 048-6 and 027-6) when a primary crusher malfunctions or is otherwise inoperative.

[A.A.C. R18-2-306.A.11]

(2) When operating under AOS5, the Permittee may operate only one Bar Grizzly (EG1 or EG2), one Apron Feeder (EGAF1 or EGAF2), and one Belt Conveyor (EGBC1 or EGBC2) of the Emergency Grizzly System for each primary crusher that is inoperative.

[A.A.C. R18-2-306.A.11, -306.01.A, and -331.A.3.a]

[Material permit conditions are indicated by underline and italics]

c. Air Pollution Prevention Requirements

(1) At all times when operating under AOS5, the Permittee shall, to the extent practicable, utilize wet suppression on the following emission units to minimize particulate matter emissions and comply with the applicable emission limitations and standards of Condition II.A.2 and Condition II.B.2 above. Wet suppression options include water sprays, surfactant use, water jets, foggers, inherent moisture content (including moisture from upstream water sprays), or other equivalent control methods.

[A.A.C. R18-2-306.A.2]

(a) Unloading Ore to Bar Grizzly 1 and Bar Grizzly 1 Screening (AOS5) (Process #048-1 (AOS5));

(b) Unloading Ore to Bar Grizzly 2 and Bar Grizzly 2 Screening (AOS5) (Process #048-1 (AOS5));

(c) Bar Grizzly 1 Oversize to Temporary Oversize Stockpile (AOS5) (Process #048-2 (AOS5)); and

(d) Bar Grizzly 2 Oversize to Temporary Oversize Stockpile (AOS5) (Process #048-2 (AOS5)).

(2) When necessary when operating under AOS5, the Permittee shall, to the extent practicable, utilize wet suppression on the following emission units to minimize particulate matter emissions and comply with the applicable emission limitations and standards of

Condition II.A.2 and Condition II.B.2 above. Wet suppression options include water sprays, surfactant use, water jets, foggers, inherent moisture content (including moisture from upstream water sprays), or other equivalent control methods.

[A.A.C. R18-2-306.A.2]

- (a) Temporary Oversize Stockpile to Primary Crusher 1 (AOS5) (Process #048-6 (AOS5)); and
 - (b) Temporary Oversize Stockpile to Primary Crusher 2 (AOS5) (Process #048-6 (AOS5)).
- d. The AOS5 operations shall comply with all the requirements in Condition II.A and Condition II.B, as applicable.
- e. Monitoring, Recordkeeping, and Reporting Requirements

[A.A.C. R18-2-306.A.11.c]

The Permittee shall, contemporaneously with making the change from one operating scenario to another, record in a log a record of the scenario under which it is operating.

[A.A.C. R18-2-306.A.11.a]

III. UNCLASSIFIED SOURCES SUBJECT TO A.A.C. R18-2-730

This Section applies to equipment and operations not otherwise subject to standards of performance under Articles 7, 9, or 11 of Title 18, Chapter 2 of the A.A.C.

A. Facilities Subject to the Standards of Performance for Unclassified Sources Under A.A.C. R18-2-730

1. Applicability

The facilities subject to the requirements of this Condition III.A are identified in the last column of the Equipment List in Attachment "C." For the Bulk Flotation Equipment (CMF-B1), Molybdenum Flotation Equipment (CMF-M), Steam Deoiler (M-SD), Second Concentrator Bulk Flotation Equipment (AOS1) (S-FLO-B), and Second Concentrator Molybdenum Flotation Equipment (AOS1) (S-FLO-M), the requirements of Condition II.A and Condition II.B apply instead of the requirements of Condition III.A.2.a, Condition III.A.2.b, and Condition III.A.5.d.

2. Emission Limitations and Standards

a. Particulate Matter

- (1) The Permittee shall not cause, allow, or permit the discharge of particulate matter into the atmosphere in any one hour in total quantities in excess of the amounts calculated by one of the following equations:

[A.A.C. R18-2-730.A.1]

- (a) For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

$$E = 4.10P^{0.67}$$

Where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour; and

P = the process weight rate in tons-mass per hour.

- (b) For process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

$$E = 55.0P^{0.11} - 40$$

Where "E" and "P" are defined as indicated in Condition III.A.2.a(1)(a) above.

- (2) For purposes of Condition III.A.2.a(1) above, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

[A.A.C. R18-2-730.B]

b. Opacity

- (1) The opacity of any plume or effluent from any existing, stationary, point source shall not be greater than 20%.

[A.A.C. R18-2-702.B.3]

- (2) If the presence of uncombined water is the only reason for an exceedance of the visible emissions requirement in Condition III.A.2.b(1) above, the exceedance shall not constitute a violation of the applicable opacity limit.

[A.A.C. R18-2-702.C]

3. Operational Limitations

- a. The Permittee shall not cause, allow, or permit the emission of gaseous or odorous materials from equipment, operations or premises under its control in such quantities or concentrations as to cause air pollution.

[A.A.C. R18-2-730.D]

- b. Materials including solvents or other volatile compounds, paints, acids, alkalis, pesticides, fertilizers and manure shall be processed, stored, used and transported in such a manner and by such means that they will not

evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage or discharge, the installation and use of such control methods, devices, or equipment shall be mandatory.

[A.A.C. R18-2-730.F]

- c. Where a stack, vent or other outlet is at such a level that fumes, gas mist, odor, smoke, vapor or any combination thereof constituting air pollution is discharged to adjoining property, the Director may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet by the Permittee to a degree that will adequately dilute, reduce or eliminate the discharge of air pollution to adjoining property.

[A.A.C. R18-2-730.G]

- d. The Permittee shall not allow H₂S to be emitted from any location in such manner and amount that the concentration of such emissions into the ambient air at any occupied place beyond the premises on which the source is located exceeds 0.03 parts per million by volume for any averaging period of 30 minutes or more.

[A.A.C. R18-2-730.H]

- e. The Natural Gas Flare chamber temperature shall be greater than or equal to 1300°F whenever the Steam Deoiler (M-SD) is operating.

[A.A.C. R18-2-306.A.2]

4. Air Pollution Prevention and Control Requirements

- a. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate mist eliminators on the CLP Cooling Tower (Process #042-11) to minimize particulate matter emissions and comply with the applicable emission limitations and standards of Condition III.A.2 above.

[A.A.C. R18-2-306.A.2]

- b. *At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the Primary Venturi Scrubber CH-02 and the Secondary Venturi Scrubber CH-03, if necessary, to minimize emissions from the Pressure Leach Vessel (Process #042-4) and comply with the applicable emission limitations and standards of Condition III.A.2 and the applicable operational limitations of Condition III.A.3 above.*

[A.A.C. R18-2-306.A.2 and -331.A.3.e]

[Material permit conditions are indicated by underline and italics]

- c. *At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the Packed Scrubber 1, Packed Scrubber 2, and Natural Gas Flare to minimize volatile organic compound emissions from the Steam Deoiler (Process #047-5) and comply with the applicable operational limitations of Condition III.A.3 above.*

[A.A.C. R18-2-306.A.2 and -331.A.3.e]

[Material permit conditions are indicated by underline and italics]

- d. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, operate the Lime Storage and Handling Operations according to the following:
- [A.A.C. R18-2-306.A.2]
- (1) Pneumatic conveying shall be used during delivery of lime from trucks to Lime Storage Bins 1 and 2; and
 - (2) Enclosures shall be used during material transfers from Lime Storage Bins 1 and 2 to Lime Weigh Feeders 1 through 3.
- e. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, operate bin vent filters on the following equipment to minimize particulate matter emissions and comply with the applicable emission limitations and standards of Condition III.A.2 above.
- [A.A.C. R18-2-306.A.2]
- (1) Soda Ash Storage Bin (Process #047-9);
 - (2) Lime Storage Bin 1 (Process #007-3) and
 - (3) Lime Storage Bin 2 (Process #007-4).
- f. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, utilize covers on the mixer-settler units associated with the following operations to comply with the applicable operational limitations of Condition III.A.3 above.
- [A.A.C. R18-2-306.A.2]
- (1) Solution Extraction - Molybdenum Pressure Leaching (Process #047-8); and
 - (2) Solution Extraction - Main Systems (Process #029-1).
- g. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, utilize one or more of the following methods on the cells associated with Electrowinning - Main System (Process #011-1) to comply with the applicable operational limitations of Condition III.A.3 above.
- [A.A.C. R18-2-306.A.2]
- (1) Foam;
 - (2) Blankets;
 - (3) Surfactants;

- (4) Brushes;
 - (5) Thermal retention balls; or
 - (6) Other effective means as approved by the Director.
- h. *At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, install, maintain and operate the following pollution control devices to minimize particulate matter emissions from unloading of leaching catalyst and comply with the applicable emission limitations and standards of Condition III.A.2 above.*
[A.A.C. R18-2-306.A.2 and -331.A.3.d, e]
 [Material permit conditions are indicated by underline and italics]
- (1) *LC Dust Collector 1 (Process #029-5); and*
 - (2) *LC Dust Collector 2 (Process #029-6).*

5. Monitoring, Recordkeeping, and Reporting Requirements

- a. Primary Venturi Scrubber CH-02 and Secondary Venturi Scrubber CH-03
- (1) *The Permittee shall calibrate, maintain, and operate a monitoring device for the continuous measurement of the change in pressure of the gas stream through the scrubbers (when in operation). The monitoring device must be certified by the manufacturer to be accurate within ± 250 pascals (± 1 inch water) gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions.*
[A.A.C. R18-2-306.A.3.c and -331.A.3.c]
 [Material permit conditions are indicated by underline and italics]
 - (2) *The Permittee shall calibrate, maintain, and operate a monitoring device for the continuous measurement of the scrubbing liquid flow rate to the scrubbers (when in operation). The monitoring device must be certified by the manufacturer to be accurate within $\pm 5\%$ of design scrubbing liquid flow rate and must be calibrated on at least an annual basis in accordance with manufacturer's instructions.*
[A.A.C. R18-2-306.A.3.c and -331.A.3.c]
 [Material permit conditions are indicated by underline and italics]
 - (3) Except for system breakdowns, repairs, calibration checks, and zero and span adjustments, the monitoring devices in Condition III.A.5.a(1) and Condition III.A.5.a(2) shall be in continuous operation whenever the scrubbers are operating.
[A.A.C. R18-2-306.A.3.c]
 - (4) The Permittee shall record on a weekly basis the measurements of both the change in pressure of the gas stream across the scrubber and the scrubbing liquid flow rate.
[A.A.C. R18-2-306.A.3.c]

- (5) The Permittee shall submit semiannual reports to the Director of occurrences when the measurements of the scrubber pressure loss (or gain) or liquid flow rate differ by more than $\pm 30\%$ from the average obtained during the most recent performance test.

[A.A.C. R18-2-306.A.3.c]

- (6) The reports required under Condition III.A.5.a(5) shall be postmarked within 30 days following the end of the second and fourth calendar quarters.

[A.A.C. R18-2-306.A.3.c]

b. Packed Scrubber 1 and Packed Scrubber 2

- (1) *The Permittee shall calibrate, maintain, and operate a monitoring device for the continuous measurement of the scrubbing liquid flow rate to the scrubbers (when in operation). The monitoring device must be certified by the manufacturer to be accurate within $\pm 5\%$ of design scrubbing liquid flow rate and must be calibrated on at least an annual basis in accordance with manufacturer's instructions.*

[A.A.C. R18-2-306.A.3.c and -331.A.3.c]

[Material permit conditions are indicated by underline and italics]

- (2) Except for system breakdowns, repairs, calibration checks, and zero and span adjustments, the monitoring device in Condition III.A.5.b(1) shall be in continuous operation whenever the scrubbers are operating. The monitoring device shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

[A.A.C. R18-2-306.A.3.c]

- (3) The Permittee shall record on a weekly basis the measurements of the scrubbing liquid flow rate.

[A.A.C. R18-2-306.A.3.c]

- (4) The Permittee shall submit semiannual reports to the Director of occurrences when the measurements of the liquid flow rate differ by more than $\pm 30\%$ from the average obtained during the most recent performance test.

[A.A.C. R18-2-306.A.3.c]

- (5) The reports required under Condition III.A.5.b(4) shall be postmarked within 30 days following the end of the second and fourth calendar quarters.

[A.A.C. R18-2-306.A.3.c]

c. Natural Gas Flare

- (1) *The Permittee shall calibrate, maintain, and operate a thermocouple or any other equivalent device for the continuous measurement of temperature in the Natural Gas Flare (M-F)*

chamber (when in operation). *The monitoring device must be certified by the manufacturer to be accurate within $\pm 100^{\circ}F$ and must be calibrated on an annual basis in accordance with manufacturer's instructions.*

[A.A.C. R18-2-306.A.3.c and -331.A.3.c]

[Material permit conditions are indicated by underline and italics]

- (2) Except for system breakdowns, repairs, and calibration checks, the monitoring device in Condition III.A.5.c(1) shall be in continuous operation whenever the flare is operating.

[A.A.C. R18-2-306.A.3.c]

- d. The Permittee shall conduct the periodic opacity monitoring method specified in Condition I.C above on a monthly basis for the following emission units subject to Condition III.A:

[A.A.C. R18-2-306.A.3.c]

- (1) Transfer of Soda Ash to the Soda Ash Storage Bin (Process #047-9);
- (2) Transfer of Lime to Lime Storage Bin 1 (Process #007-3);
- (3) Transfer of Lime to Lime Storage Bin 2 (Process #007-4);
- (4) Delivery of Ammonium Nitrate Prill to Prill Bin 1 (Process #050-1);
- (5) Delivery of Ammonium Nitrate Prill to Prill Bin 2 (Process #050-2);
- (6) Delivery of Ammonium Nitrate Prill to Prill Bin 4 (Process #050-5);
- (7) Delivery of Ammonium Nitrate Prill to Prill Bin 5 (Process #050-6);
- (8) Transfer of Leaching Catalyst to LC Feed Hopper 1 (Process #029-5);
- (9) Transfer of Leaching Catalyst to LC Feed Hopper 2 (Process #029-6);
- (10) Transfer of Lime to Second Concentrator Lime Silo (AOS1) (Process #007-6 (AOS1));
- (11) Second Concentrator Lime Slaker (AOS1) (Process #007-7 (AOS1)); and
- (12) Delivery of Ammonium Nitrate Prill to Prill Bin 6 (AOS1) (Process #050-7 (AOS1)).

- e. The Permittee shall keep a record of which technique is used to minimize emissions from the cells associated with Electrowinning - Main System (Process #011-1).

[A.A.C. R18-2-306.A.3.c]

6. Permit Shield

Compliance with the requirements of Condition III.A shall be deemed compliance with A.A.C. R18-2-702.B.3, 702.C, 730.A.1, 730.B, 730.D, 730.F, 730.G, and 730.H.

[A.A.C. R18-2-325]

B. Voluntary Emission Limitations

1. Applicability

The facilities subject to the requirements of this Condition III.B are identified in the last column of the Equipment List in Attachment "C."

2. Emission Limitations and Standards

- a. *The Permittee shall not allow the emissions of PM and PM₁₀ from the processes identified in Section I of the table in Attachment "D" to exceed 2.75 lb/hr, as measured at the emission exhaust point to the atmosphere.*

[A.A.C. R 18-2-306.01.A and -331.A.3.a]

[Material permit conditions are indicated by underline and italics]

- b. *The Permittee shall not allow the emissions of VOC from the processes identified in Section J of the table in Attachment "D" to exceed 1.36 lb/hr, as measured at the emission exhaust point to the atmosphere.*

[A.A.C. R 18-2-306.01.A and -331.A.3.a]

[Material permit conditions are indicated by underline and italics]

3. Performance Testing Requirements

- a. The Permittee shall conduct performance tests for PM and PM₁₀ on the Pressure Leach Vessel as controlled by the Primary Venturi Scrubber CH-02 and Secondary Venturi Scrubber CH-03 (Process #042-4) a minimum of once during the permit term to demonstrate compliance with the emission limits in Condition III.B.2.a above.

[A.A.C. R18-2-306.A.3.c and -312]

- b. The Permittee shall conduct performance tests for VOC on the Steam Deoiler as controlled by the Packed Scrubber 1, Packed Scrubber 2, and Natural Gas Flare (Process #047-5) a minimum of once during the permit term to demonstrate compliance with the emission limits in Condition III.B.2.b above.

[A.A.C. R18-2-306.A.3.c and -312]

- c. If the result of any performance test required by Condition III.B.3.a or Condition III.B.3.b above is less than or equal to 70% of the applicable

emission limits in Condition III.B.2 above, no further testing is required for that control device during the permit term.

[A.A.C. R18-2-306.A.3.c and -312]

- d. If the result of any performance test required by Condition III.B.3.a or Condition III.B.3.b above is greater than 70% of the applicable emission limits in Condition III.B.2 above, the Permittee shall conduct subsequent performance test(s) for PM, PM₁₀, and/or VOC on the stack of that pollution control device on an annual basis (between 11 and 13 months from the date of the previous test).

[A.A.C. R18-2-306.A.3.c and -312]

- e. If the result of any subsequent performance test required by Condition III.B.3.d above is less than or equal to 70% of the applicable emission limits in Condition III.B.2 above, no further testing is required for that control device during the permit term.

[A.A.C. R18-2-306.A.3.c and -312]

- f. EPA Reference Method 5 in 40 CFR 60, Appendix A and (if necessary) EPA Reference Method 202 specified in 40 CFR 51, Appendix M shall be used to determine emissions of PM. All particulate matter measured by the above reference method can be considered to have an aerodynamic diameter less than 10 microns or EPA Reference Method 201 or 201A and (if necessary) Method 202 specified in 40 CFR 51, Appendix M can be used to determine emissions of PM₁₀.

[A.A.C. R18-2-306.A.3.c and -312]

- g. EPA Reference Method 25A/25B in 40 CFR 60, Appendix A shall be used to determine emissions of VOC.

[A.A.C. R18-2-306.A.3.c and -312]

IV. BOILERS, STEAM GENERATORS, HEATERS, AND FURNACES

This Section applies to all boilers, steam generators, heaters (including fuel-burning pressure washers), and furnaces regardless of fuel type.

- A.** Equipment Subject to the Standards of Performance for Fossil-Fuel Fired Industrial Equipment Under A.A.C. R18-2-724

1. Applicability

The equipment subject to the requirements of this Condition IV.A are identified in the last column of the Equipment List in Attachment "C."

2. Fuel Limitation

- a. The Permittee shall fire only diesel fuel in the diesel external combustion equipment identified in the Equipment List in Attachment "C."

[A.A.C. R18-2-306.A.2]

- b. The Permittee shall fire only propane fuel in the propane external combustion equipment identified in the Equipment List in Attachment "C."

[A.A.C. R18-2-306.A.2]

- c. The Permittee shall fire only natural gas fuel in the natural gas external combustion equipment identified in the Equipment List in Attachment "C."

[A.A.C. R18-2-306.A.2]

- d. The use of high sulfur oil in the fossil-fuel fired industrial equipment is prohibited.

[A.A.C. R18-2-724.G]

3. Emission Limitations and Standards

a. Particulate Matter

- (1) The Permittee shall not cause, allow, or permit the emission of particulate matter, caused by combustion of fuel, from any fuel-burning operation in excess of the amounts calculated by one of the following equations:

[A.A.C. R18-2-724.C]

- (a) For equipment having a heat input rate of 4,200 million Btu per hour or less, the maximum allowable emissions shall be determined by the following equation:

$$E = 1.02 * Q^{0.769}$$

Where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour; and

Q = the heat input in MMBtu per hour.

- (b) For equipment having a heat input rate greater than 4,200 million Btu per hour, the maximum allowable emissions shall be determined by the following equation:

$$E = 17.0 * Q^{0.432}$$

Where "E" and "Q" have the same meaning as in Condition IV.A.3.a(1)(a) above.

- (2) For the purposes of Condition IV.A.3.a(1) above, the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet. The total heat input of all operating fuel-burning units on a plant or premises

shall be used for determining the maximum allowable amount of particulate matter which may be emitted.

[A.A.C. R18-2-724.B]

b. Opacity

The Permittee shall not cause, allow, or permit the opacity of any plume or effluent from any fuel burning equipment to exceed 15 percent.

[A.A.C. R18-2-724.J]

c. Sulfur Dioxide

For the diesel-fired equipment, the Permittee shall limit the emission of sulfur dioxide to no more than 1.0 pound per million Btu heat input.

[A.A.C. R18-2-724.E]

4. Monitoring, Recordkeeping, and Reporting Requirements

a. The Permittee shall conduct the periodic opacity monitoring method specified in Condition I.C above on a monthly basis for the diesel-fired equipment.

[A.A.C. R18-2-306.A.3.c]

b. The Permittee shall report all six-minute periods in which the opacity of any plume or effluent from the fuel burning equipment exceeds 15 percent.

[A.A.C. R18-2-724.J]

c. For the diesel-fired equipment, the Permittee shall maintain records of the sulfur content of the fuel being fired. This may be accomplished by maintaining a copy of that part of the contract with the vendor that specifies the sulfur content of the fuel.

[A.A.C. R18-2-306.A.3.c]

5. Permit Shield

Compliance with the requirements of Condition IV.A shall be deemed compliance with A.A.C. R18-2-724.B, -724.C, -724.E, -724.G, and -724.J.

[A.A.C. R18-2-325]

B. Equipment Subject to NSPS Requirements for Small Industrial Steam Generating Units Under 40 CFR 60 Subpart Dc

1. Applicability

The equipment subject to the requirements of this Condition IV.B are identified in the last column of the Equipment List in Attachment "C."

2. Fuel Limitations

The Permittee shall fire only natural gas fuel in the natural gas external combustion equipment listed in the Equipment List in Attachment "C."

[A.A.C. R18-2-306.A.2]

3. Monitoring, Recordkeeping and Reporting Requirements

a. Except as provided in Condition IV.B.3.b and Condition IV.B.3.c, for each affected facility, the Permittee shall record and maintain records of the amount of each fuel combusted during each operating day.

[40 CFR 60.48c(g)(1)]

b. As an alternative to meeting the requirements of Condition IV.B.3.a, for an affected facility that combusts only natural gas, the Permittee may elect to record and maintain monthly records of the amount of each fuel combusted during each calendar month.

[40 CFR 60.48c(g)(2)]

c. As an alternative to meeting the requirements of Condition IV.B.3.a, for an affected facility that combusts only natural gas, the Permittee may elect to record and maintain records of the total amount of fuel delivered during each calendar month.

[40 CFR 60.48c(g)(3)]

d. The Permittee shall maintain the records required by Condition IV.B.3.a through Condition IV.B.3.c for a period of two years following the date of such record.

[40 CFR 60.48c(i)]

4. Permit Shield

Compliance with the requirements of Condition IV.B shall be deemed compliance with 40 CFR 60.48c(g) and 60.48c(i).

[A.A.C. R18-2-325]

V. NONMETALLIC MINERAL PROCESSING OPERATIONS

This Section applies to equipment and operations associated with nonmetallic mineral processing operations.

A. Facilities Subject to the Standards of Performance for Existing Gravel or Crushed Stone Processing Plants Under A.A.C. R18-2-722

1. Applicability

The facilities subject to the requirements of this Condition V.A are identified in the last column of the Equipment List in Attachment "C."

2. Emission Limitations and Standards

a. Particulate Matter

(1) The Permittee shall not cause, allow, or permit the discharge of particulate matter into the atmosphere except as fugitive emissions in any one hour in total quantities in excess of the amounts calculated by one of the following equations:

[A.A.C. R18-2-722.B]

- (a) For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

$$E = 4.10P^{0.67}$$

Where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.

- (b) For process sources having a process weight greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

$$E = 55.0P^{0.11} - 40$$

Where "E" and "P" are defined as indicated in Condition V.A.2.a(1)(a) above.

b. Opacity

- (1) The opacity of any plume or effluent from any existing, stationary, point source shall not be greater than 20%.

[A.A.C. R18-2-702.B.3]

- (2) If the presence of uncombined water is the only reason for an exceedance of the visible emissions requirement in Condition V.A.2.b(1) above, the exceedance shall not constitute a violation of the applicable opacity limit.

[A.A.C. R18-2-702.C]

3. Air Pollution Prevention Requirements

- a. The Permittee shall utilize spray bar pollution controls in accordance with "EPA Control of Air Emissions From Process Operations In The Rock Crushing Industry" (EPA 340/1-79-002), "Wet Suppression System" (pages 15-34, amended as of January 1979 (and no future amendments or editions)), with placement of spray bars and nozzles as required by the Director to minimize air pollution.

[A.A.C. R18-2-722.D]

- b. The Permittee shall control fugitive emissions from gravel or crushed stone processing plants in accordance with A.A.C. R18-2-604 through A.A.C. R18-2-607 (see Section VIII below).

[A.A.C. R18-2-722.E]

- c. At all times, the Permittee shall, to the extent practicable, utilize wet suppression on the Portable Aggregate System to minimize particulate matter emissions and comply with the applicable emission limitations and standards of Condition V.A.2 above. Wet suppression options include water sprays, surfactant use, water jets, foggers, inherent moisture content (including moisture from upstream water sprays), or other equivalent control methods.

[A.A.C. R18-2-306.A.2]

4. Monitoring, Recordkeeping, and Reporting Requirements

- a. The Permittee shall install, calibrate, maintain, and operate monitoring devices which can be used to determine daily the process weight of gravel or crushed stone produced. The weighing devices shall have an accuracy of $\pm 5\%$ over their operating range.

[A.A.C. R18-2-722.F and -331.A.3.c]

[Material permit conditions are indicated by underline and italics]

- b. The Permittee shall maintain a record of daily production rates of gravel or crushed stone produced.

[A.A.C. R18-2-722.G]

- c. The Permittee shall conduct the periodic opacity monitoring method specified in Condition I.C above on a monthly basis for all emission units subject to Condition V.A.

[A.A.C. R18-2-306.A.3.c]

5. Permit Shield

Compliance with the requirements of Condition V.A shall be deemed compliance with A.A.C. R18-2-702.B.3, 702.C, 722.B, 722.D, 722.E, 722.F, and 722.G.

[A.A.C. R18-2-325]

B. Facilities Subject to the NSPS Requirements for Nonmetallic Mineral Processing Plants Under 40 CFR 60 Subpart OOO

1. Applicability

The facilities subject to the requirements of this Condition V.B are identified in the last column of the Equipment List in Attachment "C."

2. Emission Limitations and Standards

- a. Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup, the Permittee shall not cause to be discharged into the atmosphere from crushers at which a capture system is not used any fugitive emissions that exhibit greater than 12% opacity.

[A.A.C. R18-2-331.A.3.f and 40 CFR 60.672(b) including Table 3]

[Material permit conditions are indicated by underline and italics]

- b. *Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup, the Permittee shall not cause to be discharged into the atmosphere from grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations or from any other affected facility, except as provide in Condition V.B.2.a above, any fugitive emissions that exhibit greater than 7% opacity.*

[A.A.C. R18-2-331.A.3.f and 40 CFR 60.672(b) including Table 3]

[Material permit conditions are indicated by underline and italics]

- c. Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of Condition V.B.2.a and Condition V.B.2.b above.

[40 CFR 60.672(d)]

3. Operational Limitations

At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[40 CFR 60.11(d)]

4. Air Pollution Prevention Requirements

At all times, the Permittee shall, to the extent practicable, utilize wet suppression on the Portable Aggregate System to minimize particulate matter emissions and comply with the applicable emission limitations and standards of Condition V.B.2 above. Wet suppression options include water sprays, surfactant use, water jets, foggers, inherent moisture content (including moisture from upstream water sprays), or other equivalent control methods.

[A.A.C. R18-2-306.A.2]

5. Monitoring, Recordkeeping, and Reporting Requirements

- a. For any affected facility that uses wet suppression to control emissions, the Permittee shall perform monthly inspections to check that water is flowing to the discharge spray nozzles in the wet suppression system. The Permittee must initiate corrective action within 24 hours and complete corrective action as expeditiously as practical if the Permittee finds that water is not flowing properly during an inspection of the water spray nozzles. The Permittee must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken, in the logbook required under Condition V.B.5.c.

[40 CFR 60.674(b)]

- b. If an affected facility that routinely uses wet suppression water sprays ceases operation of the water sprays or is using a control mechanism to reduce fugitive emissions other than water sprays during the monthly inspection (for example, water from recent rainfall), the logbook entry required by Condition V.B.5.c must specify the control mechanism being used instead of the water sprays.

[40 CFR 60.674(b)(2)]

- c. The Permittee shall record each periodic inspection required under Condition V.B.5.a, including dates and any corrective actions taken, in a logbook (in written or electronic format). The Permittee shall keep the logbook onsite and make hard or electronic copies (whichever is requested) of the logbook available to EPA upon request.

[40 CFR 60.676(b)(1)]

- d. The Subpart A requirement under 40 CFR 60.7(a)(1) for notification of the date construction or reconstruction commenced is waived for the affected facilities.

[40 CFR 60.676(h)]

- e. The Permittee shall submit to EPA a notification of the actual date of initial startup of each affected facility. The notification shall be postmarked within 15 days after such date and shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available.

[40 CFR 60.676(i)]

6. Performance Testing Requirements

- a. The Permittee shall conduct performance tests on all affected facilities as specified in Condition V.B.6.b through Condition V.B.6.j below.

[40 CFR 60.11 and 40 CFR 60.672(b) including Table 3]

- b. For the purpose of demonstrating initial compliance with Condition V.B.2, an initial performance test consisting of opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility.

[40 CFR 60.11, 60.672(b), and 60.675]

- c. The Permittee shall conduct a repeat performance test according to 40 CFR 60.11 and 40 CFR 60.675 within 5 years from the previous performance test required in Condition V.B.6.b for fugitive emissions from affected facilities without water sprays.

[40 CFR 60.11, 60.672(b), and 60.675]

- d. If an affected facility relies on water carryover from upstream water sprays to control fugitive emissions, then that affected facility is exempt from the 5-year repeat testing requirement specified in Condition V.B.6.b provided that the affected facility meets the following criteria:

[40 CFR 60.672(b) and 60.674(b)(1)]

- (1) The Permittee of the affected facility conducts periodic inspections of the upstream water spray(s) that are responsible for controlling fugitive emissions from the affected facility. These inspections shall be conducted according to Condition V.B.5.a and Condition V.B.5.c; and
 - (2) The Permittee of the affected facility designates which upstream water spray(s) will be periodically inspected at the time of the initial performance test required by Condition V.B.6.b.
- e. In determining compliance with the particulate matter standards in Condition V.B.2, the Permittee shall use Method 9 of Appendix A-4 of 40 CFR 60 and the procedures in 40 CFR 60.11, with the following additions:
[40 CFR 60.675(c)(1)]
- (1) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).
 - (2) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (*e.g.*, road dust). The required observer position relative to the sun (Method 9 of Appendix A-4 of 40 CFR 60, Section 2.1) must be followed.
 - (3) For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.
- f. When determining compliance with Condition V.B.2, the duration of the Method 9 (40 CFR 60, Appendix A-4) observations must be 30 minutes (five 6-minute averages). Compliance with Condition V.B.2 must be based on the average of the five 6-minute averages.
[40 CFR 60.675(c)(3)]
- g. If emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used:
[40 CFR 60.675(e)(1)]
- (1) Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream.
 - (2) Separate the emissions so that the opacity of emissions from each affected facility can be read.

- h. A single visible emission observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions are met:
[40 CFR 60.675(e)(2)]
- (1) No more than three emission points may be read concurrently.
 - (2) All three emission points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.
 - (3) If an opacity reading for any one of the three emission points equals or exceeds the applicable standard, then the observer must stop taking readings for the other two points and continue reading just that single point.
- i. For performance tests involving only Method 9 (40 CFR 60 Appendix A-4) testing, the Permittee may reduce the 30-day advance notification of performance test in 40 CFR 60.7(a)(6) and 40 CFR 60.8(d) to a 7-day advance notification.
[40 CFR 60.675(g)]
- j. The Permittee shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in Condition V.B.2.
[40 CFR 60.676(f)]

7. Permit Shield

Compliance with the requirements of Condition V.B shall be deemed compliance with 40 CFR 60.11, 60.672(b), 60.672(d), 60.674(b), 60.675(c)(1), 60.675(c)(3), 60.675(e)(1), 60.675(e)(2), 60.675(g), 60.676(b)(1), 60.676(f), 60.676(h), and 60.676(i).

[A.A.C. R18-2-325]

VI. RECIPROCATING INTERNAL COMBUSTION ENGINES (RICES)

This Section applies to all emergency and non-emergency compression-ignition (CI) and spark-ignition (SI) internal combustion engines (ICE) regardless of fuel type.

- A. Emergency and Non-Emergency Engines Subject to Standards of Performance for Existing Stationary Rotating Machinery Under A.A.C. R18-2-719
1. Applicability

The engines subject to the requirements of this Condition VI.A are identified in the last column of the Equipment List in Attachment "C."
 2. Fuel Limitations

- a. The Permittee shall fire only diesel fuel in the engines listed in the Diesel Emergency ICE and Diesel Non-Emergency ICE sections of the Equipment List in Attachment “C.”
[A.A.C. R18-2-306.A.2]
- b. The Permittee shall fire only propane fuel in the engines listed in the Propane Emergency ICE and Propane Non-Emergency ICE sections of the Equipment List in Attachment “C.”
[A.A.C. R18-2-306.A.2]
- c. The Permittee shall fire only natural gas fuel in the engines listed in the Natural Gas Emergency ICE section of the Equipment List in Attachment “C.”
[A.A.C. R18-2-306.A.2]
- d. The use of high sulfur oil in the existing stationary rotating machinery is prohibited.
[A.A.C. R18-2-719.H]

3. Emission Limitations and Standards

a. Particulate Matter

- (1) The Permittee shall not cause, allow, or permit the emission of particulate matter, caused by combustion of fuel, from any stationary rotating machinery in excess of the amounts calculated by one of the following equations:

[A.A.C. R18-2-719.C]

- (a) For equipment having a heat input rate of 4,200 million Btu per hour or less, the maximum allowable emissions shall be determined by the following equation:

$$E = 1.02 Q^{0.769}$$

Where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour

Q = the heat input in million Btu per hour

- (b) For equipment having a heat input rate greater than 4,200 million Btu per hour, the maximum allowable emissions shall be determined by the following equation:

$$E = 17.0 * Q^{0.432}$$

Where “E” and “Q” have the same meaning as in Condition VI.A.3.a(1)(a) above.

- (2) For the purposes of Condition VI.A.3.a(1) above, the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet. The total heat input of all operating fuel-burning units at a plant or premises shall be used for determining the maximum allowable amount of particulate matter which may be emitted.

[A.A.C. R18-2-719.B]

b. Opacity

The Permittee shall not cause, allow or permit to be emitted into the atmosphere from any stationary rotating machinery, smoke for any period greater than 10 consecutive seconds which exceeds 40% opacity. Visible emissions when starting cold equipment shall be exempt from this requirement for the first 10 minutes.

[A.A.C. R18-2-719.E]

c. Sulfur Dioxide

For the diesel-fired emergency and non-emergency engines, the Permittee shall limit the emission of sulfur dioxide to no more than 1.0 pound per million Btu heat input.

[A.A.C. R18-2-719.F]

4. Monitoring, Recordkeeping and Reporting Requirements

- a. The Permittee shall conduct the periodic opacity monitoring method specified in Condition I.C above on a monthly basis for all emission units subject to Condition VI.A.

[A.A.C. R18-2-306.A.3.c]

- b. The Permittee shall record daily the sulfur content and lower heating value of the fuel being fired. This may be accomplished by maintaining a copy of that part of the contract with the vendor that specifies the sulfur content and lower heating value of the fuel.

[A.A.C. R18-2-719.I]

- c. The Permittee shall report to the Director any daily period during which the sulfur content of the fuel being fired exceeds 0.8%.

[A.A.C. R18-2-719.J]

5. Permit Shield

Compliance with the requirements of Condition VI.A shall be deemed compliance with A.A.C. R18-2-719.B, 719.C, 719.E, 719.F, 719.H, 719.I, and 719.J.

[A.A.C. R18-2-325]

B. New Emergency Engines Subject to NSPS Requirements for CI ICE Under 40 CFR 60 Subpart III

1. Applicability

The engines subject to the requirements of this Condition VI.B are identified in the last column of the Equipment List in Attachment "C."

2. Fuel Requirements

For stationary CI ICE with a displacement of less than 30 liters per cylinder that use diesel fuel, the Permittee shall use diesel fuel that meets the following requirements of 40 CFR 1090.305 for nonroad diesel fuel:

- a. A maximum sulfur content of 15 ppm; and
- b. A minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.

[40 CFR 60.4207(b)]

3. Emission Limitations and Standards

a. Non-Fire Pump Engines

- (1) For 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 kW (3,000 hp) and a displacement of less than 10 liters per cylinder that are not fire pump engines, the Permittee shall comply with the following emission standards.

[40 CFR 60.4202(a), 60.4205(b)]

- (a) Engines with a Maximum Engine Power Less Than 37 kW (50 hp)

The certification emission standards for new nonroad CI engines in 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, 40 CFR 1039.115, and Table 2 of 40 CFR 60 Subpart IIII, for 2008 model year and later engines.

- (b) Engines with a Maximum Engine Power Greater Than or Equal to 37 kW (50 hp)

The Tier 2 or Tier 3 emission standards for new nonroad CI engines for the same rated power as described in 40 CFR 1039 Appendix I, for all pollutants and the smoke standards as specified in 40 CFR 1039.105 beginning in model year 2007.

- (2) For 2011 model year and later emergency stationary CI ICE with a maximum engine power greater than 2,237 kW (3,000 hp) and a displacement of less than 10 liters per cylinder that are not fire pump engines, the Permittee shall comply with the Tier 2 emission standards as described in 40 CFR 1039 Appendix I, for all pollutants and the smoke standards as specified in 40 CFR 1039.105.

[40 CFR 60.4202(b), 60.4205(b)]

b. Fire Pump Engines

For fire pump engines with a displacement of less than 30 liters per cylinder, the Permittee shall comply with the emission standards in Table 4 of 40 CFR 60 Subpart IIII, for all pollutants.

[40 CFR 60.4205(c)]

4. Operating Requirements

a. The Permittee shall operate and maintain the engines that achieve the emission standards as required in Condition VI.B.3 over the entire life of the engine.

[40 CFR 60.4206]

b. The Permittee shall operate and maintain the engine and control device according to the manufacturer's emission-related written instructions, except as permitted under Condition VI.B.5.b.

[40 CFR 60.4211(a)(1)]

c. The Permittee shall only change those engine-related settings that are permitted by the manufacturer except as permitted under Condition VI.B.5.b.

[40 CFR 60.4211(a)(2)]

d. The Permittee shall meet the applicable requirements of 40 CFR Part 1068.

[40 CFR 60.4211(a)(3)]

e. *For an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, the Permittee shall install a non-resettable hour meter prior to startup of the engine.*

[A.A.C. R18-2-331.A.3.c and 40 CFR 60.4209(a)]

[Material permit conditions are indicated by underline and italics]

f. The Permittee shall operate the emergency engine according to the requirements in Condition VI.B.4.f(1) through Condition VI.B.4.f(4). In order for the engine to be considered an emergency stationary engine, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in Condition VI.B.4.f(1) through Condition VI.B.4.f(4), is prohibited. If the Permittee does not operate the engine according to the requirements in Condition VI.B.4.f(1) through Condition VI.B.4.f(4), the engine will not be considered an emergency engine and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of the emergency engine in emergency situations.

[40 CFR 60.4211(f)(1)]

(2) The Permittee may operate the engine for the purpose of maintenance checks and readiness testing for a maximum of 100

hours per calendar year, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission operator, or the insurance company associated with the engine. The Permittee may petition the Director for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. Any operation for non-emergency situations as allowed by Condition VI.B.4.f(3) counts as part of the 100 hours per calendar year allowed by this condition.

[40 CFR 60.4211(f)(2)]

- (3) The Permittee may operate an emergency engine up to 50 hours per year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in Condition VI.B.4.f(2). Except as provided in Condition VI.B.4.f(4), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 CFR 60.4211(f)(3)]

- (4) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all the following conditions are met:

[40 CFR 60.4211(f)(3)(i)]

- (a) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
- (b) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- (c) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- (d) The power is provided only to the facility itself or to support the local transmission and distribution system.
- (e) The Permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or

guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the Permittee.

5. Compliance Requirements

- a. The Permittee shall comply by purchasing an engine certified to the emission standards in Condition VI.B.3, as applicable. The engine shall be installed and configured according to the manufacturer's specifications, except as permitted in Condition VI.B.5.b.

[40 CFR 60.4211(c)]

- b. If the Permittee does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or changes the emission-related setting in a way that is not permitted by the manufacturer, the Permittee shall demonstrate compliance as follows:

[40 CFR 60.4211(g)]

(1) Engines Less Than 100 hp

The Permittee shall keep a maintenance plan and records of conducted maintenance to demonstrate compliance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

(2) Engines Greater Than or Equal to 100 hp and Less Than or Equal to 500 hp

The Permittee shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after emission-related settings are changed in a way that is not permitted by the manufacturer.

(3) Engines Greater Than 500 hp

The Permittee shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable,

maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after emission-related settings are changed in a way that is not permitted by the manufacturer. Subsequent performance tests shall be conducted every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

6. Recordkeeping Requirements

- a. Starting with the model years in Table 5 of 40 CFR 60 Subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the Permittee shall keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The Permittee shall record the time of operation of the engine and the reason the engine was in operation during that time.

[40 CFR 60.4214(b)]

- b. For an emergency stationary CI ICE with a maximum engine power more than 100 hp that operates for the purposes specified in Condition VI.B.4.f(4), the Permittee shall submit an annual report according to the requirements in 40 CFR 60.4214(d)(1) through 60.4214(d)(3).

[40 CFR 60.4214(d)]

7. Permit Shield

Compliance with the requirements of Condition VI.B shall be deemed compliance with 40 CFR 60.4202(a)(2), 60.4205(b), 60.4206, 60.4207(b), 60.4209(a), 60.4211(a), 60.4211(c), 60.4211(f), 60.4211(g), 60.4214(b), and 60.4214(d).

[A.A.C. R18-2-325]

C. New Emergency Engines Subject to NSPS Requirements for SI ICE Under 40 CFR 60 Subpart JJJJ

1. Applicability

The engines subject to the requirements of this Condition VI.C are identified in the last column of the Equipment List in Attachment "C."

2. Emission Limitations and Standards

- a. Engines with a maximum power less than or equal to 25 hp, a displacement ≥ 225 cc (Class II), and manufactured on July 1, 2011 or later

[40 CFR 60.4231(a)(4) and 4233(a), 40 CFR 1054.105]

(1) Carbon Monoxide (CO)

The Permittee shall limit the emissions of CO from the engine to 610 g/kW-hr.

(2) Nitrogen Oxides (NO_x) and Hydrocarbons (HC)

The Permittee shall limit the combined emissions of NO_x and HC from the engine to 8.0 g/kW-hr or as otherwise specified in 40 CFR 1054.105.

b. Engines with a maximum power greater than 25 hp but less than 130 hp that are rich burn engines, use liquefied petroleum gas (LPG), and are manufactured on January 1, 2009 or later:

[40 CFR 60.4231(c) and 4233(e), 40 CFR 90.103(a), Table 1, Phase 1, Class II]

(1) Carbon Monoxide (CO)

The Permittee shall limit the emissions of CO from the engine to 519 g/kW-hr.

(2) Nitrogen Oxides (NO_x) and Hydrocarbons (HC)

The Permittee shall limit the combined emissions of NO_x and HC from the engine to 13.4 g/kW-hr.

c. Engines with a maximum power greater than 25 hp but less than 100 hp (except gasoline and rich burn engines that use LPG) and manufactured on January 1, 2009 or later:

[40 CFR 60.4233(d) and 40 CFR 60 Subpart JJJJ Table 1]

(1) Carbon Monoxide (CO)

The Permittee shall limit the emissions of CO from the engine to 387 g/hp-hr.

(2) Nitrogen Oxides (NO_x) and Hydrocarbons (HC)

The Permittee shall limit the combined emissions of NO_x and HC from the engine to 10 g/hp-hr.

d. Engines with a maximum power greater than or equal to 100 hp but less than 130 hp (except gasoline and rich burn engines that use LPG) and manufactured on January 1, 2009 or later:

[40 CFR 60.4233(e) and 40 CFR 60 Subpart JJJJ Table 1]

(1) Carbon Monoxide (CO)

The Permittee shall limit the emissions of CO from the engine to 387 g/hp-hr.

(2) Nitrogen Oxides (NO_x) and Hydrocarbons (HC)

The Permittee shall limit the combined emissions of NO_x and HC from the engine to 10 g/hp-hr.

- e. Engines with a maximum power greater than or equal to 130 hp (except gasoline and rich burn engines that use LPG) and manufactured on January 1, 2009 or later:

[40 CFR 60.4233(e) and 40 CFR 60 Subpart JJJJ Table 1]

(1) Carbon Monoxide (CO)

The Permittee shall limit the emissions of CO from the engine to 4.0 g/hp-hr.

(2) Nitrogen Oxides (NO_x)

The Permittee shall limit the emissions of NO_x from the engine to 2.0 g/hp-hr.

(3) Volatile Organic Compounds (VOC)

The Permittee shall limit the emissions of VOC from the engine to 1.0 g/hp-hr.

3. Operating Requirements

- a. The Permittee shall operate and maintain stationary SI ICE that achieve the emission standards as required in Condition VI.C.2 over the entire life of the engine.

[40 CFR 60.4234]

b. Non-Resettable Hour Meters

- (1) *For the engines that are greater than or equal to 130 hp and less than 500 hp built on or after January 1, 2011 that do not meet the standards applicable to non-emergency engines, the Permittee shall install non-resettable hour meters.*

[A.A.C. R18-2-331.A.3.c and 40 CFR 60.4237(b)]

[Material permit conditions are indicated by underline and italics]

- (2) *For the engines less than 130 hp built on or after July 1, 2008 that do not meet the standards applicable to non-emergency engines, the Permittee shall install non-resettable hour meters upon startup.*

[A.A.C. R18-2-331.A.3.c and 40 CFR 60.4237(c)]

[Material permit conditions are indicated by underline and italics]

- c. The Permittee shall operate the emergency engine according to the requirements in Condition VI.C.3.c(1) through Condition VI.C.3.c(4). In order for the engine to be considered an emergency stationary engine, any

operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in Condition VI.C.3.c(1) through Condition VI.C.3.c(4), is prohibited. If the Permittee does not operate the engine according to the requirements in Condition VI.C.3.c(1) through Condition VI.C.3.c(4), the engine will not be considered an emergency engine and must meet all requirements for non-emergency engines.

- (1) There is no time limit on the use of emergency stationary SI ICE in emergency situations.

[40 CFR 60.4243(d)(1)]

- (2) The Permittee may operate the SI ICE for the purpose of maintenance checks and readiness testing for a maximum of 100 hours per calendar year, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission operator, or the insurance company associated with the engine. The Permittee may petition the Director for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. Any operation for non-emergency situations as allowed by Condition VI.C.3.c(3) counts as part of the 100 hours per calendar year allowed by this condition.

[40 CFR 60.4243(d)(2)]

- (3) The Permittee may operate the emergency SI ICE for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in Condition VI.C.3.c(2). Except as provided in Condition VI.C.3.c(4) below, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 CFR 60.4243(d)(3)]

- (4) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all the following conditions are met:

[40 CFR 60.4243(d)(3)(i)]

- (a) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
- (b) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential

voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

- (c) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
 - (d) The power is provided only to the facility itself or to support the local transmission and distribution system.
 - (e) The Permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the Permittee.
- d. The Permittee may operate the SI natural gas fired engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the Permittee is required to conduct a performance test to demonstrate compliance with the emission standards of 40 CFR 60.4233.

[40 CFR 60.4243(e)]

4. Compliance Requirements

- a. The Permittee operating an SI ICE manufactured after July 1, 2008 and subject to the emission standards specified in Condition VI.C.2.a and Condition VI.C.2.b, shall demonstrate compliance by purchasing an engine certified to the emission standards in Condition VI.C.2.a and Condition VI.C.2.b, as applicable for the same engine class and maximum engine power. In addition, the Permittee shall meet one of the following requirements:

[40 CFR 60.4243(a)]

- (1) If the Permittee operates and maintains the certified SI ICE and control device according to the manufacturer's emission-related written instructions, the Permittee shall keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. Also, the Permittee shall meet the applicable requirements of 40 CFR 1068, Subparts A through D. If engine settings are adjusted according to and consistent with the manufacturer's instructions, the stationary SI ICE will not be considered out of compliance.

[40 CFR 60.4243(a)(1)]

- (2) If the Permittee does not operate and maintain the certified stationary SI ICE and control device in accordance with the manufacturer's emission-related written instructions, the SI ICE will be considered a non-certified engine, and the Permittee shall demonstrate compliance as follows:

[40 CFR 60.4243(a)(2)]

- (a) Engines Less Than 100 hp

The Permittee shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions, but no performance testing is required.

- (b) Engines Greater Than or Equal to 100 hp and Less Than or Equal to 500 hp

The Permittee shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee shall conduct an initial performance test within 1 year of engine startup to demonstrate compliance.

- b. The Permittee operating an SI ICE and subject to the emission standards specified in Condition VI.C.2.c through Condition VI.C.2.e, shall demonstrate compliance according to one of the following methods:

[40 CFR 60.4243(b)]

- (1) Purchasing an engine certified according to procedures specified in 40 CFR 60 Subpart JJJJ, for the same model year and demonstrating compliance according to one of the methods specified in Condition VI.C.4.a(1) and Condition VI.C.4.a(2).

[40 CFR 60.4243(b)(1)]

- (2) Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in Condition VI.C.2.c through Condition VI.C.2.e and according to the requirements specified in 40 CFR 60.4244, as applicable, and according to the following:

For an SI ICE greater than 25 hp and less than or equal to 500 hp, the Permittee shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In

addition, the Permittee shall conduct an initial performance test to demonstrate compliance.

[40 CFR 60.4243(b)(2)]

- c. For SI ICE that is less than or equal to 500 hp and is either a non-certified engine or not operated and maintained according to the manufacturer's written emission-related instructions, perform initial performance testing as indicated in Condition VI.C.4.a and Condition VI.C.4.b, but do not conduct subsequent performance testing unless the stationary engine is rebuilt or undergoes major repair or maintenance. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a).

[40 CFR 60.4243(f)]

5. Recordkeeping and Reporting Requirements

- a. For each SI ICE, the Permittee shall maintain records of the following:

[40 CFR 60.4245(a)]

- (1) All notifications submitted to comply with 40 CFR 60 Subpart JJJJ and all documentation supporting any notification;
- (2) Maintenance conducted on the engine;
- (3) If the SI ICE is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards in Condition VI.C.2 and information as required in 40 CFR Parts 90, 1048, 1054, and 1060 as applicable; and
- (4) If the SI ICE is not a certified engine or is a certified engine operating in a non-certified manner and subject to Condition VI.C.4.a(2), documentation that the engine meets the emission standards.

- b. For all stationary SI emergency ICE greater than or equal to 130 hp and less than 500 hp manufactured on or after July 1, 2011 that do not meet the standards applicable to non-emergency engines, the Permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For stationary SI emergency ICE greater than 25 hp and less than 130 hp manufactured on or after July 1, 2008, that do not meet the standards applicable to non-emergency engines, the Permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. Document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

[40 CFR 60.4245(b)]

- c. For stationary SI ICE that are subject to performance testing, the Permittee shall submit a copy of each performance test as conducted in 40 CFR 60.4244 within 60 days after the test has been completed. Performance

test reports using EPA Method 18, EPA Method 320, or ASTM D6348-03 (incorporated by reference—see 40 CFR 60.17) to measure VOC require reporting of all QA/QC data. For Method 18, report results from sections 8.4 and 11.1.1.4; for Method 320, report results from sections 8.6.2, 9.0, and 13.0; and for ASTM D6348-03 report results of all QA/QC procedures in Annexes 1-7.

[40 CFR 60.4245(d)]

- d. For an emergency stationary SI ICE with a maximum engine power more than 100 hp that operates for the purposes specified in Condition VI.C.3.c(4), the Permittee shall submit an annual report according to the requirements in 40 CFR 60.4245(e)(1) through 40 CFR 60.4245(e)(3).

[40 CFR 60.4245(e)]

6. Permit Shield

Compliance with the requirements of Condition VI.C shall be deemed compliance with 40 CFR 60.4231(a)(4), 60.4231(c), 60.4233(a), 60.4233(c), 60.4233(d), 60.4233(e), 60.4234, 60.4237(b), 60.4237(c), 60.4243(a), 60.4243(b), 60.4243(d), 60.4243(e), 60.4243(f), 60.4245(a), 60.4245(b), 60.4245(d), and 60.4245(e).

[A.A.C. R18-2-325]

D. Existing Emergency Engines Subject to the NESHAP Requirements for Stationary RICE Under 40 CFR 63 Subpart ZZZZ

1. Applicability

The engines subject to the requirements of this Condition VI.D are identified in the last column of the Equipment List in Attachment “C.”

2. General Requirements

- a. The Permittee shall operate and maintain at all times the engine including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require any further efforts to reduce emissions if levels required by 40 CFR 63 Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 CFR 63.6605(b)]

- b. The Permittee shall minimize the engine time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

[40 CFR 63.6625(h)]

- c. The Permittee shall operate and maintain the engine and after-treatment control device (if any) according to the manufacturer's emission-related

written instructions or develop a maintenance plan which shall provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[40 CFR 63.6625(e)]

3. Fuel Requirements

For existing emergency CI stationary RICE with a site rating of more than 100 brake hp and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates for the purpose specified in Condition VI.D.4.d(4), the Permittee shall use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel. The requirements in 40 CFR 80.510(b) include:

- a. Sulfur content \leq 15 ppm; and
- b. Cetane index \geq 40 or aromatic content \leq 35% by volume.

[40 CFR 63.6604(b)]

4. Operation Requirements

- a. For the CI emergency engines, the Permittee shall comply with the following operation and maintenance requirements:

[40 CFR 63.6603(a), 63.6625(i) and 40 CFR 63, Subpart ZZZZ, Table 2d]

- (1) The Permittee shall change the oil and filter every 500 hours operation or annually, whichever comes first. If the Permittee prefers to extend the oil change requirement, an oil analysis program shall be completed. The oil analysis must be performed at the same frequency specified for changing the oil. The Permittee shall at a minimum analyze the following three parameters: Total Base Number, viscosity and water content. The condemning limits for these parameters are as follows:

- (a) Total Base Number: less than 30 percent of the Total Base Number of the oil when new;
- (b) Viscosity: changed more than 20 percent from the viscosity of oil when new; and
- (c) Water Content: greater than 0.5 percent by volume.

If all the condemning limits are not exceeded, the Permittee is not required to change the oil. If any of the condemning limits are exceeded, the Permittee shall change the oil within 2 business days of receiving the results of the analysis or before commencing operation, whichever is later. The analysis program shall be part of the maintenance plan for the engine.

- (2) The Permittee shall inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.
 - (3) The Permittee shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
- b. For the SI emergency engines, the Permittee shall comply with the following operation and maintenance requirements:
[40 CFR 63.6603(a), 63.6625(j) and 40 CFR 63, Subpart ZZZZ, Table 2d]
- (1) The Permittee shall change the oil and filter every 500 hours operation or annually, whichever comes first. If the Permittee prefers to extend the oil change requirement, an oil analysis program shall be completed. The oil analysis must be performed at the same frequency specified for changing the oil. The Permittee shall at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows:
 - (a) Total Acid Number: increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new;
 - (b) Viscosity: changed by more than 20 percent from the viscosity of oil when new; and
 - (c) Water Content: greater than 0.5 percent by volume.

If all the condemning limits are not exceeded, the Permittee is not required to change the oil. If any of the condemning limits are exceeded, the Permittee shall change the oil within 2 business days of receiving the results of the analysis or before commencing operation, whichever is later. The analysis program shall be part of the maintenance plan for the engine.
 - (2) The Permittee shall inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
 - (3) The Permittee shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
- c. If the emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Condition VI.D.4.a or Condition VI.D.4.b, or if performing the work practice on the required schedule

would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice shall be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. The Permittee shall report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

[40 CFR 63, Subpart ZZZZ, Table 2d]

- d. The Permittee shall operate the emergency engine according to the requirements in Condition VI.D.4.d(1) through Condition VI.D.4.d(4). In order for the engine to be considered an emergency stationary RICE, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in Condition VI.D.4.d(1) through Condition VI.D.4.d(4) is prohibited. If the Permittee does not operate the engine according to the requirements in Condition VI.D.4.d(1) through Condition VI.D.4.d(4), the engine will not be considered an emergency engine and must meet all requirements for non-emergency engines:
- (1) There is no time limit on the use of emergency engine in emergency situations.

[40 CFR 60.6640(f)(1)]
 - (2) The Permittee may operate the emergency engine for the purpose of maintenance checks and readiness testing for a maximum of 100 hours per calendar year provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission operator, or the insurance company associated with the engine. The Permittee may petition the Director for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. Any operation for non-emergency situations as allowed by Condition VI.D.4.d(3) counts as part of the 100 hours per calendar year allowed by this condition.

[40 CFR 63.6640(f)(2)(i)]
 - (3) The Permittee may operate an emergency engine for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in Condition VI.D.4.d(2). Except as provided in Condition VI.D.4.d(4) below, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility

to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 CFR 63.6640(f)(4)]

- (4) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all the following conditions are met:

[40 CFR 63.6640(f)(4)(ii)]

- (a) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
- (b) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- (c) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- (d) The power is provided only to the facility itself or to support the local transmission and distribution system.
- (e) The Permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the Permittee.

- e. *The Permittee shall install a non-resettable hour meter on the engine if one is not already installed.*

[40 CFR 63.6625(f), R18-2-331.A.3.c]

[Material Permit Conditions are indicated by underline and italics]

5. Compliance Requirements

- a. The Permittee shall be in compliance with all applicable requirements of 40 CFR 63, Subpart ZZZZ at all times.

[40 CFR 63.6605(a)]

- b. The Permittee shall demonstrate continuous compliance by operating and maintaining the engine according to the manufacturer's emission-related operation and maintenance instructions, or developing and following a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[40 CFR 63.6640(a), Table 6, Entry 9]

6. Recordkeeping Requirements

a. If the engine does not meet the standards applicable to non-emergency engines, the Permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. Records shall include how many hours are spent for emergency operation, including what classified the operation as emergency, and how many hours are spent for non-emergency operation. If the engine is used for the purpose specified in Condition VI.D.4.d(4), the Permittee shall keep records of the date, start time, and end time of engine operation for this purpose.

[40 CFR 63.6655(f)]

b. For an emergency engine that operates for the purpose specified in Condition VI.D.4.d(4), the Permittee shall submit an annual report according to the requirements in 40 CFR 63.6650(h)(1) through 63.6650(h)(3).

[40 CFR 63.6650(a) and 63.6650(h) including Table 7, Entry 4]

c. If the Permittee elects to utilize the oil analysis program option in Condition VI.D.4.a(1) and Condition VI.D.4.b(1) above, it shall keep records of the parameters that are analyzed as part of the oil analysis program, the results of the analysis, and the oil changes for the engine.

[40 CFR 63.6625(i) and (j)]

d. The Permittee shall keep records of the maintenance conducted on the engine in order to demonstrate that the engine and after-treatment control device (if any) was operated and maintained according to any developed maintenance plan.

[40 CFR 63.6655(e)]

e. The notification requirements in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) do not apply to an existing stationary emergency RICE.

[40 CFR 63.6645(a)(5)]

f. The Permittee shall keep each record in hard copy or electronic form for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The records shall be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

[40 CFR 63.6660(a)-(c)]

7. Permit Shield

Compliance with the requirements of Condition VI.D shall be deemed compliance with 63.6603(a), 63.6604(b), 63.6605(a), 63.6605(b), 63.6625(e), 63.6625(f), 63.6625(h), 63.6625(i), 63.6625(j), 63.6640(a), 63.6640(f), 63.6645(a)(5), 63.6650(a), 63.6650(h), 63.6655(e), 63.6655(f), and 63.6660(a) through (c).

[A.A.C. R18-2-325]

E. New Emergency and Non-Emergency Engines Subject to the NESHAP Requirements for Stationary RICE Under 40 CFR 63 Subpart ZZZZ

1. Applicability

The engines subject to the requirements of this Condition VI.E are identified in the last column of the Equipment List in Attachment “C.”

2. Compliance

The Permittee shall meet the requirements of 40 CFR 63 Subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart IIII for CI engines (Condition VI.B or VI.F) or 40 CFR 60 Subpart JJJJ for SI engines (Condition VI.C), as applicable. No further requirements apply for such engines under 40 CFR 63 Subpart ZZZZ.

[40 CFR 63.6590(c)]

3. Permit Shield

Compliance with the requirements of Condition VI.E shall be deemed compliance with 40 CFR 63.6590(c).

[A.A.C. R18-2-325]

F. New Non-Emergency Engines Subject to NSPS Requirements for CI ICE Under 40 CFR 60 Subpart IIII

1. Applicability

The engines subject to the requirements of this Condition VI.F are identified in the last column of the Equipment List in Attachment “C”.

2. Fuel Requirements

For stationary CI ICE with a displacement of less than 30 liters per cylinder that use diesel fuel, the Permittee shall use diesel fuel that meets the following requirements of 40 CFR 1090.30 for nonroad diesel fuel:

a. A maximum sulfur content of 15 ppm; and

b. A minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.

[40 CFR 60.4207(b)]

3. Emission Limitations and Standards

For 2007 model year and later non-emergency engines with a maximum engine power less than or equal to 2,237 kW (3,000 hp) and displacement of less than 10 liters per cylinder, the Permittee shall comply with the emission standards for new nonroad CI engines in 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, and 40 CFR 1039 Appendix I, as applicable, for all pollutants, for the same model year and maximum engine power.

[40 CFR 60.4201(a) and 60.4204(b)]

4. Operating Requirements

- a. The Permittee shall operate and maintain the engines that achieve the emission standards as required in Condition VI.F.3 over the entire life of the engine.

[40 CFR 60.4206]

- b. The Permittee shall operate and maintain the engine and control device according to the manufacturer's emission-related written instructions, except as permitted under Condition VI.F.5.b.

[40 CFR 60.4211(a)(1)]

- c. The Permittee shall only change those engine-related settings that are permitted by the manufacturer except as permitted under Condition VI.F.5.b.

[40 CFR 60.4211(a)(2)]

- d. The Permittee shall meet the applicable requirements of 40 CFR Part 1068.

[40 CFR 60.4211(a)(3)]

- e. If the engine is equipped with a diesel particulate filter to comply with the emission standards in Condition VI.F.3, the diesel particulate filter shall be installed with a backpressure monitor that notifies the Permittee when the high backpressure limit of the engine is approached.

[40 CFR 60.4209(b)]

5. Compliance Requirements

- a. The Permittee shall comply by purchasing an engine certified to the emission standards in Condition VI.F.3, as applicable. The engine shall be installed and configured according to the manufacturer's emission-related specifications, except as permitted in Condition VI.F.5.b.

[40 CFR 60.4211(c)]

- b. If the Permittee does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or changes the emission-related setting in a way that is not permitted by the manufacturer, the Permittee shall demonstrate compliance as follows:

[40 CFR 60.4211(g)]

- (1) For engines less than 100 hp, the Permittee shall keep a maintenance plan and records of conducted maintenance to demonstrate compliance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

- (2) For engines greater than or equal to 100 hp and less than or equal to 500 hp, the Permittee shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the emission-related settings are changed in a way that is not permitted by the manufacturer.

6. Recordkeeping Requirements

If the engine is equipped with a diesel particulate filter, the Permittee shall keep records of any corrective action taken after the backpressure monitor has provided notification that the high backpressure limit of the engine is approached.

[40 CFR 60.4214(c)]

G. Existing Non-Emergency Engines Subject to the NESHAP Requirements for Stationary RICE Under 40 CFR 63 Subpart ZZZZ

1. Applicability

The engines subject to the requirements of this Condition VI.G are identified in the last column of the Equipment List in Attachment "C".

2. General Requirements

- a. The Permittee shall operate and maintain at all times the engine including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require any further efforts to reduce emissions if levels required by 40 CFR 63 Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 CFR 63.6605(b)]

- b. The Permittee shall minimize the engine time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

[40 CFR 63.6625(h)]

- c. The Permittee shall operate and maintain the engine and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which shall provide to

the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[40 CFR 63.6625(e)]

3. Operation Requirements

a. For the CI non-emergency engines, the Permittee shall comply with the following operation and maintenance requirements:

[40 CFR 63.6603(a), 63.6625(i) and 40 CFR 63, Subpart ZZZZ, Table 2d]

(1) The Permittee shall change the oil and filter every 1,000 hours operation or annually, whichever comes first. If the Permittee prefers to extend the oil change requirement, an oil analysis program shall be completed. The oil analysis must be performed at the same frequency specified for changing the oil. The Permittee shall at a minimum analyze the following three parameters: Total Base Number, viscosity and water content. The condemning limits for these parameters are as follows:

(a) Total Base Number: less than 30 percent of the Total Base Number of the oil when new;

(b) Viscosity: changed more than 20 percent from the viscosity of oil when new; and

(c) Water Content: greater than 0.5 percent by volume.

If all the condemning limits are not exceeded, the Permittee is not required to change the oil. If any of the condemning limits are exceeded, the Permittee shall change the oil within 2 business days of receiving the results of the analysis or before commencing operation, whichever is later. The analysis program shall be part of the maintenance plan for the engine.

(2) The Permittee shall inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.

(3) The Permittee shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

b. For the SI non-emergency engines, the Permittee shall comply with the following operation and maintenance requirements:

[40 CFR 63.6603(a), 63.6625(j) and 40 CFR 63, Subpart ZZZZ, Table 2d]

(1) The Permittee shall change the oil and filter every 1,440 hours operation or annually, whichever comes first. If the Permittee prefers to extend the oil change requirement, an oil analysis program shall be completed. The oil analysis must be performed

at the same frequency specified for changing the oil. The Permittee shall at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows:

- (a) Total Acid Number: increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new;
- (b) Viscosity: changed by more than 20 percent from the viscosity of oil when new; and
- (c) Water Content: greater than 0.5 percent by volume.

If all the condemning limits are not exceeded, the Permittee is not required to change the oil. If any of the condemning limits are exceeded, the Permittee shall change the oil within 2 business days of receiving the results of the analysis or before commencing operation, whichever is later. The analysis program shall be part of the maintenance plan for the engine.

- (2) The Permittee shall inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and
- (3) The Permittee shall inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.

4. Compliance Requirements

- a. The Permittee shall be in compliance with all applicable requirements of 40 CFR 63, Subpart ZZZZ at all times.
[40 CFR 63.6605(a)]
- b. The Permittee shall demonstrate continuous compliance by operating and maintaining the engine according to the manufacturer's emission-related operation and maintenance instructions, or developing and following a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
[40 CFR 63.6640(a), Table 6, Entry 9]

5. Recordkeeping Requirements

- a. If the Permittee elects to utilize the oil analysis program option in Condition VI.G.3.a(1)VI.D.4.a(1) and Condition VI.G.3.b(1) above, it shall keep records of the parameters that are analyzed as part of the oil

analysis program, the results of the analysis, and the oil changes for the engine.

[40 CFR 63.6625(i) and (j)]

- b. The Permittee shall keep records of the maintenance conducted on the engine in order to demonstrate that the engine and after-treatment control device (if any) was operated and maintained according to any developed maintenance plan.

[40 CFR 63.6655(e)]

- c. The Permittee shall keep each record in hard copy or electronic form for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The records shall be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

[40 CFR 63.6660(a)-(c)]

VII. GASOLINE STORAGE TANKS AND GASOLINE DISPENSING FACILITIES

This Section applies to all gasoline storage tanks and gasoline dispensing facilities.

- A.** Gasoline Storage Tanks Subject to the Standards of Performance for Existing Storage Vessels for Petroleum Liquids Under A.A.C. R18-2-710

1. Applicability

The gasoline storage tanks subject to the requirements of this Condition VII.A are identified in the last column of the Equipment List in Attachment "C."

2. Emission Limitations and Standards

- a. The petroleum liquid storage tanks shall be equipped with a submerged filling device, or acceptable equivalent, for the control of hydrocarbon emissions.

[A.A.C. R18-2-710.B]

- b. All pumps and compressors which handle volatile organic compounds shall be equipped with mechanical seals or other equipment of equal efficiency to prevent the release of organic contaminants into the atmosphere.

[A.A.C. R18-2-710.D]

3. Monitoring, Recordkeeping, and Reporting Requirements

For each petroleum liquid storage vessel, the Permittee shall maintain a file of the type of petroleum liquid stored, the typical Reid vapor pressure of the petroleum liquid stored, and the dates of storage. Dates on which the storage vessel is empty shall be shown.

[A.A.C. R18-2-710.E.1]

4. Permit Shield

Compliance with the requirements of Condition VII.A shall be deemed compliance with A.A.C. R18-2-710.B, 710.D, and 710.E.1.

[A.A.C. R18-2-325]

B. Gasoline Dispensing Facilities and Associated Gasoline Storage Tanks Subject to the NESHAP Requirements Under 40 CFR 63 Subpart CCCCC

1. Applicability

- a. Condition VII.B applies to the Gasoline Dispensing Facilities (GDF) and associated gasoline storage tanks as identified in the last column of the Equipment List in Attachment "C."
- b. Condition VII.B also applies to the associated equipment components in vapor or liquid gasoline service, pressure/vacuum vents on gasoline storage tanks and equipment necessary to unload product from cargo tanks into storage tanks at GDFs. The equipment used for the refueling of motor vehicles is not covered.

[40 CFR 63.1111(a) and 63.1112(a)]

2. Operational Limitations

- a. The Permittee shall, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 CFR 63.1115(a)]

- b. Requirements for GDFs with Monthly Throughputs of Less Than 10,000 Gallons

- (1) The Permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:

[40 CFR 63.1111(b), 63.1116(a)]

- (a) Minimize gasoline spills;
- (b) Clean up spills as expeditiously as practicable;
- (c) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a cover having a gasketed seal when not in use;

- (d) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
- (2) Portable gasoline containers that meet the requirements of 40 CFR 59 Subpart F, are considered acceptable for compliance with Condition VII.B.2.b(1)(c).
[40 CFR 63.11111(b) and 63.11116(d)]
- c. Requirements for GDFs with Monthly Throughputs Greater Than or Equal to 10,000 Gallons and Less Than 100,000 Gallons
- (1) The Permittee shall comply with all the requirements of Condition VII.B.2.b(1) and Condition VII.B.2.b(2) above.
[40 CFR 63.11111(c) and 63.11117(a)]
- (2) Except as specified in Condition VII.B.2.c(3), the Permittee shall load gasoline into storage tanks by utilizing submerged filling, as defined in 40 CFR 63.11132, and according to the following specifications. The applicable distances in Condition VII.B.2.c(2)(a) and Condition VII.B.2.c(2)(b) shall be measured from the point in the opening of the submerged fill pipe that is the greatest distance from the bottom of the storage tank.
- (a) The submerged fill pipes installed on or before November 9, 2006, must be no more than 12 inches from the bottom of the storage tank.
[40 CFR 63.11117(b)(1)]
- (b) The submerged fill pipes installed after November 9, 2006, must be no more than 6 inches from the bottom of the storage tank.
[40 CFR 63.11117(b)(2)]
- (c) Submerged fill pipes not meeting the specifications in Condition VII.B.2.c(2)(a) and Condition VII.B.2.c(2)(b) shall be allowed if the Permittee can demonstrate that the liquid level in the tank is always above the entire opening of the fill pipe. Documentation providing such demonstration must be made available for inspection by the Director's delegated representative during the course of a site visit.
[40 CFR 63.11117(b)(3)]
- (3) Gasoline storage tanks with a capacity of less than 250 gallons are not required to comply with the submerged fill requirements in Condition VII.B.2.c(2) but must comply only with all the requirements in 40 CFR 63.11116.
[40 CFR 63.11117(c)]

- d. The dispensing of gasoline from a fixed gasoline storage tank at a GDF into a portable gasoline tank for the on-site delivery and subsequent dispensing of the gasoline into the fuel tank of a motor vehicle or other gasoline-fueled engine or equipment used within the area source is only subject to Condition VII.B.2.b.

[40 CFR 63.11111(j)]

- e. Increases in Monthly Throughput

- (1) If the monthly throughput of a GDF subject to Condition VII.B.2.b ever equals or exceeds 10,000 gallons but remains less than 100,000 gallons, the GDF shall comply with the requirements in Condition VII.B.2.c and all other requirements applicable to GDFs with monthly throughputs greater than or equal to 10,000 gallons and less than 100,000 gallons no later than 3 years after the affected GDFs becomes subject to the new requirements. The GDF shall remain subject to the requirements, even if the throughput later falls below the 10,000 gallons throughput threshold.

[40 CFR 63.11111(c) and (i), 63.11113(c)]

- (2) If the throughput of a GDF subject to Condition VII.B.2.c ever exceeds 100,000 gallons, the GDF shall comply with the requirements in 40 CFR 63 Subpart CCCCCC for GDF with monthly throughputs greater than or equal to 100,000 gallons no later than 3 years after the affected GDFs becomes subject to the new requirements. The GDF shall remain subject to the requirements even if the throughput later falls below the 100,000 gallons throughput threshold.

[40 CFR 63.11111(d) and (i), 63.11113(c)]

3. Notification Requirements for GDFs with Monthly Throughputs Greater Than or Equal to 10,000 Gallons and Less Than 100,000 Gallons

- a. The Permittee shall submit an Initial Notification to the Director and the Administrator at the time a GDF becomes subject to the control requirements of Condition VII.B.2.c. The Initial Notification must contain the information specified in 40 CFR 63.11124(a)(1)(i) through 40 CFR 63.11124(a)(1)(iii).

[40 CFR 63.11111(c), 63.11117(e), and 63.11124(a)(1)]

- b. The Permittee shall submit a Notification of Compliance Status to the Director and the Administrator, as specified in 40 CFR 63.13 within 60 days of the applicable compliance date specified in 40 CFR 63.11113. The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy, must indicate whether the source has complied with the requirements of 40 CFR 63 Subpart CCCCCC, and must indicate whether the GDF's monthly throughput is calculated based on the volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks. If the GDF is in compliance

with the requirements of 40 CFR 63 Subpart CCCCCC at the time the Initial Notification is due, the Notification of Compliance Status may be submitted in lieu of the Initial Notification provided it contains the information required by 40 CFR 63.11124(a)(1).

[40 CFR 63.11111(c), 63.11117(e), and 63.11124(a)(2)]

4. Monitoring, Recordkeeping and Reporting Requirements

- a. The Permittee shall upon request by the Director, demonstrate that the monthly throughput for an affected source is less than the 10,000-gallon or the 100,000-gallon threshold level, as applicable. The records shall be kept for a period of 5 years.

[40 CFR 63.11111(e)]

- b. Monthly throughput is the total volume of gasoline that is loaded into, or dispensed from, all gasoline storage tanks at each GDF during a month. Monthly throughput is calculated by summing the volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the current day, plus the total volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the previous 364 days, and then dividing that sum by 12.

[40 CFR 63.11111(h) and 63.11132]

- c. The Permittee shall have records available within 24 hours of a request by the Director to document gasoline throughput.

[63.11116(b) and 63.11117(d)]

- d. The Permittee shall maintain records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

[40 CFR 63.11115(b) and 63.11125(d)(1)]

- e. The Permittee shall maintain records of actions taken during periods of malfunction to minimize emissions in accordance with Condition VII.B.2.a including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[40 CFR 63.11115(b) and 63.11125(d)(2)]

- f. For GDFs with monthly throughputs greater than or equal to 10,000 gallons and less than 100,000 gallons, the Permittee shall report, by March 15 of each year, the number, duration, and a brief description of each type of malfunction which occurred during the previous calendar year and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the Permittee during a malfunction of an affected source to minimize emissions in accordance with Condition VII.B.2.a including actions taken to correct a malfunction. No report is necessary for a calendar year in which no malfunctions occurred.

[40 CFR 63.11115(b) and 63.11126(b)]

5. Permit Shield

Compliance with the requirements of Condition VII.B shall be deemed compliance with 40 CFR 63.11111(a), 63.11111(b), 63.11111(c), 63.11111(d), 63.11111(e), 63.11111(h), 63.11111(i), 63.11111(j), 63.11112(a), 63.11113(c), 63.11115(a), 63.11115(b), 63.11116(a), 63.11116(b), 63.11116(d), 63.11117(a), 63.11117(b), 63.11117(c), 63.11117(d), 63.11117(e), 63.11124(a)(1), 63.11124(a)(2), 63.11125(d), 63.11126(b), and 63.11132.

[A.A.C. R18-2-325]

VIII. FUGITIVE DUST REQUIREMENTS

A. Applicability

This Section applies to any non-point source of fugitive dust in the facility.

B. Particulate Matter and Opacity

Open Areas, Roadways & Streets, Storage Piles, and Material Handling

1. Emission Limitations and Standards

- a. Opacity of emissions from any fugitive dust non-point source shall not be greater than 40%. An open fire permitted under A.A.C. R18-2-602 or regulated under Article 15 of Title 18, Chapter 2 of the A.A.C. is exempt from this requirement.

[A.A.C. R18-2-614]

- b. The Permittee shall employ the following reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne:

- (1) Keep dust and other types of air contaminants to a minimum in an open area where construction operations, repair operations, demolition activities, clearing operations, leveling operations, or any earth moving or excavating activities are taking place, by good modern practices such as using an approved dust suppressant or adhesive soil stabilizer, paving, covering, landscaping, continuous wetting, detouring, barring access, or other acceptable means;

[A.A.C. R18-2-604.A]

- (2) Keep dust to a minimum from driveways, parking areas, and vacant lots where motor vehicular activity occurs by using an approved dust suppressant, or adhesive soil stabilizer, or by paving, or by barring access to the property, or by other acceptable means;

[A.A.C. R18-2-604.B]

- (3) Keep dust and other particulates to a minimum by employing dust suppressants, temporary paving, detouring, wetting down or by

other reasonable means when a roadway or alley is used, repaired, constructed, or reconstructed;

[A.A.C. R18-2-605.A]

- (4) Take reasonable precautions, such as wetting, applying dust suppressants, or covering the load when transporting material likely to give rise to airborne dust. Earth or other material that is deposited by trucking or earth moving equipment shall be removed from paved streets by the person responsible for such deposits.

[A.A.C. R18-2-605.B]

- (5) Take reasonable precautions, such as wetting, applying dust suppressants, or covering the load when transporting material likely to give rise to airborne dust. Earth or other material that is deposited by trucking or earth moving equipment shall be removed from paved streets by the person responsible for such deposits.

[A.A.C. R18-2-606]

- (6) Take reasonable precautions such as chemical stabilization, wetting, or covering when organic or inorganic dust producing material is being stacked, piled, or otherwise stored to prevent excessive amounts of particulate matter from becoming airborne;

[A.A.C. R18-2-607.A]

- (7) Operate stacking and reclaiming machinery utilized at storage piles at all times with a minimum fall of material, or with the use of spray bars and wetting agents to prevent excessive amounts of particulate matter from becoming airborne;

[A.A.C. R18-2-607.B]

- (8) Operate mineral tailings piles by taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne. Reasonable precautions shall mean wetting, chemical stabilization, revegetation or such other measures as are approved by the Director;

[A.A.C. R18-2-608]

- (9) Any other method as proposed by the Permittee and approved by the Director.

[A.A.C. R18-2-306.A.3.c]

2. Air Pollution Prevention Requirements

Haul Roads and Storage Piles

Maintaining sufficient moisture, gravel application, paving, sweeping, or an equivalent control, shall be used to control visible emissions from haul roads and storage piles.

[A.A.C. R18-2-306.A.2]

[Material Permit Condition is indicated by underline and italics]

3. Monitoring and Recordkeeping Requirements

- a. The Permittee shall maintain records of the dates on which any of the activities listed in Condition VIII.B.1.b above were performed and the control measures that were adopted.

[A.A.C. R18-2-306.A.3.c]

b. Opacity Monitoring Requirements

The Permittee shall conduct the periodic opacity monitoring method specified in Condition I.C above on a monthly basis for all emission units subject to Section VIII.

[A.A.C. R18-2-306.A.3.c]

C. Permit Shield

Compliance with the requirements of Section VIII shall be deemed compliance with A.A.C. R18-2-604, 605, 606, 607, 608, and 614.

[A.A.C. R18-2-325]

IX. OTHER PERIODIC ACTIVITIES

A. Abrasive Blasting

1. Particulate Matter and Opacity

a. Emission Limitations and Standards

The Permittee shall not cause or allow sandblasting or other abrasive blasting without minimizing dust emissions to the atmosphere through the use of good modern practices. Good modern practices include:

- (1) Wet blasting;
- (2) Effective enclosures with necessary dust collecting equipment; or
- (3) Any other method approved by the Director.

[A.A.C. R18-2-726]

b. Opacity

- (1) The opacity of any plume or effluent from any existing, stationary, point source shall not be greater than 20%.

[A.A.C. R18-2-702.B.3]

- (2) If the presence of uncombined water is the only reason for an exceedance of the visible emissions requirement in Condition IX.A.1.b(1) above, the exceedance shall not constitute a violation of the applicable opacity limit.

[A.A.C. R18-2-702.C]

2. Monitoring and Recordkeeping Requirement

Each time an abrasive blasting project is conducted, the Permittee shall make a record of the following:

- a. The date the project was conducted;
- b. The duration of the project; and
- c. Type of control measures employed.

[A.A.C. R18-2-306.A.3.c]

3. Permit Shield

Compliance with the requirements of Condition IX.A shall be deemed compliance with A.A.C. R18-2-702.B.3, 702.C, and 726.

[A.A.C.R18-2-325]

B. Use of Paints

1. Volatile Organic Compounds

a. Emission Limitations and Standards

While performing spray painting operations, the Permittee shall comply with the following requirements:

- (1) The Permittee shall not conduct or cause to be conducted any spray-painting operation without minimizing organic solvent emissions. Such operations, other than architectural coating and spot painting, shall be conducted in an enclosed area equipped with controls containing no less than 96 percent of the overspray.

[A.A.C.R18-2-727.A]

- (2) The Permittee or their designated contractor shall not either:

- (a) Employ, apply, evaporate, or dry any architectural coating containing photochemically reactive solvents for industrial or commercial purposes; or

- (b) Thin or dilute any architectural coating with a photochemically reactive solvent.

[A.A.C.R18-2-727.B]

- (3) For the purposes of Condition IX.B.1.a(2) above, a photochemically reactive solvent shall be any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified in Condition IX.B.1.a(3)(a) through Condition IX.B.1.a(3)(c), or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:

- (a) A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturation-hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones: 5 percent.
- (b) A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: 8 percent.
- (c) A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent.

[A.A.C.R18-2-727.C]

- (4) Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups of organic compounds described in Condition IX.B.1.a(3), it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents.

[A.A.C.R18-2-727.D]

b. Monitoring and Recordkeeping Requirements

- (1) Each time a spray-painting project is conducted, the Permittee shall make a record of the following:
 - (a) The date the project was conducted;
 - (b) The duration of the project;
 - (c) Type of control measures employed;
 - (d) Safety Data Sheets (SDS) for all paints and solvents used in the project; and
 - (e) The amount of paint consumed during the project.
- (2) Architectural coating and spot painting projects shall be exempt from the recordkeeping requirements of Condition IX.B.1.b(1).

[A.A.C. R18-2-306.A.3.c]

c. Permit Shield

Compliance with the requirements of Condition IX.B.1 shall be deemed compliance with A.A.C.R18-2-727.

[A.A.C.R18-2-325]

2. Opacity

a. Emission Limitation and Standard

- (1) The opacity of any plume or effluent from any existing, stationary, point source shall not be greater than 20%.

[A.A.C. R18-2-702.B.3]

- (2) If the presence of uncombined water is the only reason for an exceedance of the visible emissions requirement in Condition IX.B.2.a(1) above, the exceedance shall not constitute a violation of the applicable opacity limit.

[A.A.C. R18-2-702.C]

b. Permit Shield

Compliance with the requirements of Condition IX.B.2 shall be deemed compliance with A.A.C.R18-2-702.B.3 and 702.C..

[A.A.C. R18-2-325]

C. Demolition/Renovation - Hazardous Air Pollutants

1. Emission Limitation and Standard

The Permittee shall comply with all applicable requirements of 40 CFR 61 Subpart M (National Emissions Standards for Hazardous Air Pollutants - Asbestos).

[A.A.C. R18-2-1101.A.12]

2. Monitoring and Recordkeeping Requirement

The Permittee shall keep all required records in a file. The required records shall include the “NESHAP Notification for Renovation and Demolition Activities” form and all supporting documents.

[A.A.C. R18-2-306.A.3.c]

3. Permit Shield

Compliance with the requirements of Condition IX.C shall be deemed compliance with A.A.C. R18-2-1101.A.12.

[A.A.C. R18-2-325]

ATTACHMENT "C": EQUIPMENT LIST

Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
Primary Crushing and Overland Conveying Operations							
PC1	Primary Crusher 1	5,865 tph	Allis-Chalmers	NA	NA	1975 (reconstruction date TBD)	Conditions II.A (721, prior to reconstruction) and II.B (LL, following reconstruction)
C18	Scrubber C18	11,000 acfm	Rotoclone	Type N Model B Design 4 Size 12	NA	2001	Conditions II.A, II.B, and II.C
PC1SB	PC1 Surge Bin	600 tons	NA	NA	NA	1975 (reconstruction date TBD)	Condition II.A (721)
PC1AF	PC1 Apron Feeder	5,865 tph	NA	NA	NA	1975 (reconstruction date TBD)	Condition II.A (721)
OC1	Overland Conveyor 1	5,865 tph	NA	NA	NA	1975	Condition II.A (721)
OC2	Overland Conveyor 2	5,865 tph	NA	NA	NA	1975	Condition II.A (721)
RB	Rock Breaker	N/A	NA	NA	NA	NA	Condition II.A (721)
PC2	Primary Crusher 2	7,000 tph	Metso	60x89, MK-III	TBD	2019	Condition II.B (LL)



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
C51	Dust Collector C51	15,000 acfm	FARR	GS 36/30	NA	2013	Conditions II.B and II.C
PC2SB	PC2 Surge Bin	640 tons	Designed by M3	NA	NA	2005	Condition II.A (721)
PC2AF	PC2 Apron Feeder	6,700 tph	Metso	84"	NA	2005	Condition II.A (721)
PC2DC	PC2 Dribble Conveyor	N/A	Turner Engineering	60"	NA	2005	Condition II.A (721)
OC3A	Overland Conveyor 3A	7,600 tph	NA	60"	NA	2005	Condition II.A (721)
OC3	Overland Conveyor 3	7,600 tph	NA	54"	NA	1975	Condition II.A (721)
OC4	Overland Conveyor 4	7,600 tph	NA	54"	NA	1975	Condition II.A (721)
RST5	Radial Stacker 5	7,600 tph	NA	60"	NA	1975	Condition II.A (721)
FSS6	Free-Standing Stacker 6	7,600 tph	NA	60"	NA	1990	Condition II.A (721)
Milling Operations							
<i>Grinding Line 1</i>							



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
GL1-VF2	GL1 Vibrating Feeder 2	797 tph	Syntron	NA	NA	1976	Condition II.A (721)
GL1-VF3	GL1 Vibrating Feeder 3	797 tph	Syntron	NA	NA	1976	Condition II.A (721)
GL1-VF4	GL1 Vibrating Feeder 4	797 tph	Syntron	NA	NA	1976	Condition II.A (721)
GL1-VF5	GL1 Vibrating Feeder 5	797 tph	Syntron	NA	NA	1976	Condition II.A (721)
GL1-BCA	GL1 Belt Conveyor A	2,380 tph	NA	48"	NA	1976	Condition II.A (721)
GL1-GM1	GL1 Primary Grinding Mill	2,280 tph	Koppers	NA	NA	1976	Condition II.A (721)
GL1-VS1	GL1 Vibrating Screen	2,280 tph	FLSmidth	8' x 20'	NA	2017	Condition II.B (LL)
GL1-BC2	GL1 Belt Conveyor 2	1,300 tph	NA	36"	NA	Pre-1982	Condition II.A (721)
GL1-BC3	GL1 Belt Conveyor 3	1,300 tph	NA	36"	NA	Pre-1982	Condition II.A (721)
GL1-DG	GL1 Diverter Gate	N/A	NA	NA	NA	NA	Condition II.A (721)
GL1-BCB	GL1 Belt Conveyor B	1,300 tph	NA	40"	NA	1976	Condition II.A (721)



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
GL1-SC1	GL1 Secondary Crusher	650 tph	Metso	MP800	NA	2008	Condition II.B (LL)
C1	GL1 Dust Collector C1	15,000 acfm	FARR	GS 36/30	NA	2013	Conditions II.B and II.C
GL1-BC5	GL1 Belt Conveyor 5	1,300 tph	NA	36"	NA	Pre-1982	Condition II.A (721)
GL1-GM2	GL1 Secondary Grinding Mill	2,563 tph	Metso	15.5' x 20'	NA	1976	Condition II.A (721)
<i>Grinding Line 2</i>							
GL2-VF2	GL2 Vibrating Feeder 2	797 tph	Syntron	NA	NA	1976	Condition II.A (721)
GL2-VF3	GL2 Vibrating Feeder 3	797 tph	Syntron	NA	NA	1976	Condition II.A (721)
GL2-VF4	GL2 Vibrating Feeder 4	797 tph	Syntron	NA	NA	1976	Condition II.A (721)
GL2-VF5	GL2 Vibrating Feeder 5	797 tph	Syntron	NA	NA	1976	Condition II.A (721)
GL2-BCA	GL2 Belt Conveyor A	2,380 tph	NA	48"	NA	1976	Condition II.A (721)
GL2-GM1	GL2 Primary Grinding Mill	2,280 tph	Koppers	NA	NA	1976	Condition II.A (721)



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
GL2-VS1	GL2 Vibrating Screen	2,280 tph	FLSmidth	8' x 20'	NA	2017	Condition II.B (LL)
GL2-BC2	GL2 Belt Conveyor 2	1,300 tph	NA	36"	NA	Pre-1982	Condition II.A (721)
GL2-BC3	GL2 Belt Conveyor 3	1,300 tph	NA	36"	NA	Pre-1982	Condition II.A (721)
GL2-DG	GL2 Diverter Gate	N/A	NA	NA	NA	NA	Condition II.A (721)
GL2-BCB	GL2 Belt Conveyor B	1,300 tph	NA	40"	NA	1976	Condition II.A (721)
GL2-SC2	GL2 Secondary Crusher	650 tph	Metso	MP800	NA	2008	Condition II.B (LL)
C2	GL2 Dust Collector C2	15,000 acfm	FARR	GS 36/30	NA	2012	Conditions II.B and II.C
GL2-BC5	GL2 Belt Conveyor 5	1,300 tph	NA	36"	NA	Pre-1982	Condition II.A (721)
GL2-GM2	GL2 Secondary Grinding Mill	2,563 tph	Metso	15.5' x 20'	NA	1976	Condition II.A (721)
<i>Grinding Line 3</i>							
GL3-VF2	GL3 Vibrating Feeder 2	797 tph	Syntron	NA	NA	1976	Condition II.A (721)



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
GL3-VF3	GL3 Vibrating Feeder 3	797 tph	Syntron	NA	NA	1976	Condition II.A (721)
GL3-VF4	GL3 Vibrating Feeder 4	797 tph	Syntron	NA	NA	1976	Condition II.A (721)
GL3-VF5	GL3 Vibrating Feeder 5	797 tph	Syntron	NA	NA	1976	Condition II.A (721)
GL3-BCA	GL3 Belt Conveyor A	2,380 tph	NA	48"	NA	1976	Condition II.A (721)
GL3-GM1	GL3 Primary Grinding Mill	2,280 tph	Koppers	NA	NA	1976	Condition II.A (721)
GL3-VS1	GL3 Vibrating Screen	2,280 tph	FLSmidth	8' x 20'	NA	2017	Condition II.B (LL)
GL3-BC2	GL3 Belt Conveyor 2	1,300 tph	NA	36"	NA	Pre-1982	Condition II.A (721)
GL3-BC3	GL3 Belt Conveyor 3	1,300 tph	NA	36"	NA	Pre-1982	Condition II.A (721)
GL3-DG	GL3 Diverter Gate	N/A	NA	NA	NA	NA	Condition II.A (721)
GL3-BCB	GL3 Belt Conveyor B	1,300 tph	NA	40"	NA	1976	Condition II.A (721)
GL3-SC3	GL3 Secondary Crusher	650 tph	Metso	MP800	NA	1999	Condition II.B (LL)



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
DC3	GL3 Dust Collector DC3	15,000 acfm	FARR	GS 36/30	NA	2015	Conditions II.B and II.C
GL3-BC5	GL3 Belt Conveyor 5	1,300 tph	NA	36"	NA	Pre-1982	Condition II.A (721)
GL3-GM2	GL3 Secondary Grinding Mill	2,563 tph	Metso	15.5' x 20'	NA	1976	Condition II.A (721)



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
<i>Grinding Line 4</i>							
GL4-VF2	GL4 Vibrating Feeder 2	1,231 tph	Syntron	NA	NA	1981	Condition II.A (721)
GL4-VF3	GL4 Vibrating Feeder 3	1,231 tph	Syntron	NA	NA	1981	Condition II.A (721)
GL4-VF4	GL4 Vibrating Feeder 4	1,231 tph	Syntron	NA	NA	1981	Condition II.A (721)
GL4-VF5	GL4 Vibrating Feeder 5	1,231 tph	Syntron	NA	NA	1981	Condition II.A (721)
GL4-BCA	GL4 Belt Conveyor A	2,380 tph	NA	48"	NA	1981	Condition II.A (721)
GL4-GM1	GL4 Primary Grinding Mill	2,280 tph	Koppers	NA	NA	1981	Condition II.A (721)
GL4-VS1	GL4 Vibrating Screen	2,280 tph	FLSmith	8' x 20'	NA	2016	Condition II.B (LL)
GL4-BC2	GL4 Belt Conveyor 2	1,300 tph	NA	36"	NA	Pre-1982	Condition II.A (721)
GL4-BC3	GL4 Belt Conveyor 3	1,300 tph	NA	36"	NA	Pre-1982	Condition II.A (721)
GL4-DG	GL4 Diverter Gate	N/A	NA	NA	NA	NA	Condition II.A (721)



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
GL4-BCB	GL4 Belt Conveyor B	1,300 tph	NA	40"	NA	1981	Condition II.A (721)
GL4-SC4	GL4 Secondary Crusher	650 tph	Metso	MP800	NA	2008	Condition II.B (LL)
DC4	GL4 Dust Collector DC4	15,000 acfm	FARR	GS 40/32	NA	2015	Conditions II.B and II.C
GL4-BC5	GL4 Belt Conveyor 5	1,300 tph	NA	36"	NA	Pre-1982	Condition II.A (721)
GL4-GM2	GL4 Secondary Grinding Mill	2,563 tph	Metso	15.5' x 20'	C.684	1981	Condition II.A (721)
<i>Grinding Line 5</i>							
GL5-VF2	GL5 Vibrating Feeder 2	1,231 tph	Syntron	NA	NA	1989	Condition II.A (721)
GL5-VF3	GL5 Vibrating Feeder 3	1,231 tph	Syntron	NA	NA	1989	Condition II.A (721)
GL5-VF4	GL5 Vibrating Feeder 4	1,231 tph	Syntron	NA	NA	1989	Condition II.A (721)
GL5-VF5	GL5 Vibrating Feeder 5	1,231 tph	Syntron	NA	NA	1989	Condition II.A (721)
GL5-BCA	GL5 Belt Conveyor A	2,380 tph	NA	48"	NA	1989	Condition II.B (LL)



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
GL5-GM1	GL5 Primary Grinding Mill	2,280 tph	Koppers	NA	NA	1989	Condition II.A (721)
GL5-VS1	GL5 Vibrating Screen	2,280 tph	FLSmidth	8' x 20'	NA	2018	Condition II.B (LL)
GL5-BC2	GL5 Belt Conveyor 2	1,300 tph	NA	36"	NA	Post-1982	Condition II.B (LL)
GL5-BC3	GL5 Belt Conveyor 3	1,300 tph	NA	36"	NA	Post-1982	Condition II.B (LL)
GL5-DG	GL5 Diverter Gate	N/A	NA	NA	NA	NA	Condition II.A (721)
GL5-BCB	GL5 Belt Conveyor B	1,300 tph	NA	40"	NA	1988	Condition II.B (LL)
GL5-SC5	GL5 Secondary Crusher	650 tph	Metso	MP800	NA	2008	Condition II.B (LL)
DC5	GL5 Dust Collector DC5	15,000 acfm	FARR	GS 36/30	NA	2022	Conditions II.B and II.C
GL5-BC5	GL5 Belt Conveyor 5	1,300 tph	NA	36"	NA	Post-1982	Condition II.B (LL)
GL5-GM2	GL5 Secondary Grinding Mill	2,563 tph	Bolden Allis	NA	NA	1989	Condition II.A (721)
<i>Grinding Line Spare Equipment</i>							



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
GL-Spare1	GL Spare Vibrating Screen 1	2,280 tph	FLSmidth	8' x 20'	NA	Post-1982	Condition II.B (LL)
GL-Spare2	GL Spare Vibrating Screen 2	2,280 tph	FLSmidth	8' x 20'	NA	Post-1982	Condition II.B (LL)
Bulk and Molybdenum Flotation Operations							
CMF-B1	Bulk Flotation Equipment	N/A	NA	NA	NA	varies	Conditions II.A (721) and III.A (730)
TRS1	Tramp Reject Screen 1	N/A	Allis-Chalmers	10' x 24'	NA	1975	Condition II.A (721)
TRS2	Tramp Reject Screen 2	N/A	Allis-Chalmers	10' x 24'	NA	1981	Condition II.A (721)
TM1	Tower Mill 1	385.25 tph	Metso	VTM-1000-WB	NA	2018	Condition II.A (721)
TM2	Tower Mill 2	385.25 tph	Metso	VTM-1000-WB	NA	2018	Condition II.A (721)
CMF-M	Molybdenum Flotation Equipment	N/A	NA	NA	NA	varies	Conditions II.A (721) and III.A (730)
Copper Concentrate Processing and Loading Operations							
CuBC3a	Concentrate Filter Conveyor 1	120 tph	Superior Industries	NA	NA	2015	Condition II.B (LL)



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
CuBC3b	Concentrate Filter Conveyor 2	120 tph	Superior Industries	NA	NA	2015	Condition II.B (LL)
CuBC4	Filtered Concentrate Transfer Conveyor	240 tph	Superior Industries	NA	NA	2015	Conditions II.A (721, when transferring to a stockpile) and II.B (LL, when transferring onto the conveyor)
CuSB	Filtered Concentrate Feed Bin	600 ft3	Materials Handling Equipment Co	NA	NA	2015	Condition II.B (LL)
CuSC	Filtered Concentrate Screw Feeder	120 tph	Materials Handling Equipment Co	NA	NA	2015	Condition II.A (721)
CuBC5	Filtered Concentrate Loadout Conveyor	120 tph	Superior Industries	NA	NA	2015	Condition II.B (LL)
CuDC	Filtered Concentrate Dust Collector CuDC	8,000 acfm	FARR	GS 20/16	NA	2015	Conditions II.B and II.C
CuStB	Enclosed Copper Concentrate Storage Building	N/A	NA	NA	NA	2015	Condition II.B (LL)
Molybdenum Concentrate Processing and Bagging Operations							
MPSC1	Molybdenum Concentrate Screw Conveyor	5.0 tph	KWS	NA	NA	2008	Condition II.B (LL)



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
MPSB	Molybdenum Concentrate Surge Bin	5.0 tph	NA	NA	NA	2008	Condition II.B (LL)
MPBGR	Molybdenum Concentrate Bagger	5.0 tph	Flexicon	Swing-Down Filler BFS	NA	2008	Condition II.B (LL)
Concentrate Leach Plant							
<i>Equipment Associated with Both Copper and Molybdenum Concentrate Pressure Leaching</i>							
G2	Pressure Leach Vessel	10.5 tph	NA	NA	NA	2002	Condition III.A (730)
CH-02	Primary Venturi Scrubber CH-02	19,950 acfm	NA	NA	NA	2002	Conditions III.A and III.B
CH-03	Secondary Venturi Scrubber CH-03	23,990 acfm	NA	NA	NA	2002	Conditions III.A and III.B
G1	Natural Gas Package Boiler G1	25 MMBtu/hr	NA	NA	NA	2002	Condition IV.B (Dc)
G7	CLP Cooling Tower	4,000 gpm (total)	SPX Cooling Technologies, Inc.	NC8409UAN	NC-10144664-A1	2017	Condition III.A (730)
CM-RS	CLP Cleanup Round Separator	0.25 tph	Sweco	NA	NA	2020	Condition II.B (LL)
CM-GM	CLP Cleanup Grinding Mill	0.25 tph	Sweco	M45L	NA	2020	Condition II.A (721)



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
CM-DLC	CLP Cleanup Delumper/Crusher	0.25 tph	Franklin Miller Inc.	DC1075LP	TBD	2020	Condition II.B (LL)
<i>Equipment Associated with Copper Concentrate Pressure Leaching</i>							
C-CRH	Copper Concentrate Receiving Hopper	10.5 tph	NA	NA	NA	2002	Condition II.B (LL)
C-CBF	Copper Concentrate Belt Feeder	10.5 tph	NA	NA	NA	2002	Condition II.B (LL)
C-FGM	Copper Concentrate Fine Grinding Mill	NA	NA	NA	NA	TBD	Condition II.A (721)
<i>Equipment Associated with Molybdenum Concentrate Pressure Leaching</i>							
M-CFH	Molybdenum Concentrate Feed Hopper 1	4.0 tph	NA	NA	NA	2008	Condition II.B (LL)
M-BFd	Molybdenum Concentrate Belt Feeder	4.0 tph	NA	NA	NA	2008	Condition II.B (LL)
M-SC1	Molybdenum Concentrate Screw Conveyor 1	4.0 tph	NA	NA	NA	2008	Condition II.A (721)
M-SD	Steam Deoiler	4.0 tph	NA	NA	NA	2008	Conditions II.B (LL) and III.A (730)
M-SG	Natural Gas Steam Generator	5.23 MMBtu/hr	NA	NA	NA	2008	Condition IV.A (724)



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
M-DH	Natural Gas Deoiler Heater	6.5 MMBtu/hr	NA	NA	NA	2008	Condition IV.A (724)
M-VS	Venturi Scrubber	50 acfm	NA	NA	NA	2008	Condition II.B
M-VSa	Venturi Scrubber (alternate)	50 acfm	Mikropul	NA	NA	2021	Condition II.B
M-PS1	Packed Scrubber 1	50 acfm	NA	NA	NA	2008	Conditions III.A and III.B
M-PS2	Packed Scrubber 2	50 acfm	NA	NA	NA	2008	Conditions III.A and III.B
M-F	Natural Gas Flare	1.55 MMBtu/hr	NA	NA	NA	2008	Conditions III.A and III.B
M-ST	Settling Tank	3,294 gal	NA	NA	NA	2011	Condition III.A (730)
M-CFH3	Molybdenum Concentrate Feed Hopper 3	180 ft ³	NA	NA	NA	2021	Condition II.B (LL)
M-DC2	Molybdenum Concentrate Dust Collector 2	500 scfm	NA	NA	NA	2021	Condition II.B
M-MSC	Molybdenum Concentrate Metering Screw Conveyor with Chute	5.0 tph	NA	6" D x 5' L	NA	2022	Condition II.A (721)
M-SC3	Molybdenum Concentrate Screw Conveyor 3	5.0 tph	NA	9" D x 53' L	NA	2021	Condition II.A (721)



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
M-CFH4	Molybdenum Concentrate Feed Hopper 4	90 ft ³	NA	NA	NA	2021	Condition II.B (LL)
M-DC1	Molybdenum Concentrate Dust Collector 1	900 acfm	EnviroSystems	NA	NA	2008	Condition II.B
M-TDC1	Molybdenum Concentrate Tubular Drag Conveyor 1	8.0 tph	NA	NA	NA	2008	Condition II.A (721)
M-FGM	Molybdenum Concentrate Fine Grinding Mill	NA	NA	NA	NA	2011	Condition II.A (721)
HBF Screen 1	MoO ₃ HBF Feed Vibrating Screen	4.0 tph	SWECO	MX48Y88SDTL	088177-a01/15	2015	Condition II.B (LL)
M-BFlt	MoO ₃ Belt Filter	4.0 tph	NA	NA	NA	2008	Condition II.B (LL)
M-BFlt2	MoO ₃ Horizontal Belt Filter	4.0 tph	FLSmidth	3100M55.8	CSP0001080-01A	2015	Condition II.B (LL)
M-PrS	MoO ₃ Product Screen	7.0 tph	Sweco	TBD	TBD	2022	Condition II.B (LL)
M-SF	MoO ₃ Screw Feeder	7.0 tph	NA	9" D x 21'-6" L	NA	2022	Condition II.B (LL)
M-ISC	MoO ₃ Inclined Screw Conveyor	7.0 tph	NA	9" D x 25' L	NA	2022	Condition II.B (LL)
M-MXS1	Mixer Extraction Settler 1	283.33 ft ²	NA	NA	NA	2011	Condition III.A (730)



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
M-MXS2	Mixer Extraction Settler 2	283.33 ft2	NA	NA	NA	2011	Condition III.A (730)
M-MWS	Mixer Washer Settler	283.33 ft2	NA	NA	NA	2011	Condition III.A (730)
M-MSS1	Mixer Stripper Settler 1	283.33 ft2	NA	NA	NA	2011	Condition III.A (730)
M-MSS2	Mixer Stripper Settler 2	283.33 ft2	NA	NA	NA	2011	Condition III.A (730)
SASC	Soda Ash Screw Conveyor	1.2 tph	NA	NA	NA	2022	Condition III.A (730)
SASB-G4	Soda Ash Storage Bin	40 tons	NA	NA	NA	2003	Condition III.A (730)
G4	Soda Ash Storage Bin Bin Vent	N/A	FARR	GS6 BV	NA	2013	Condition III.A (730)
Solution Extraction/Electrowinning Operations							
--	SX Mixers (28)	50.27 ft2 each	NA	NA	NA	1969	Condition III.A (730)
--	SX Settlers (28)	812 ft2 each	NA	NA	NA	1969	Condition III.A (730)
TK-22	Organic Tank TK-22	40,215 gal	NA	NA	NA	NA	Condition III.A (730)



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
TK-13	Organic Mix Tank TK-13	67,753 gal	NA	NA	NA	NA	Condition III.A (730)
C23	Electrowinning Cells (108)	5,265 ft2 total	NA	NA	NA	1969 (48 cells) 1993 (8 cells) 2003 (52 cells)	Condition III.A (730)
IA03c-NG	Natural Gas Hot Water Pressure Washer 3	0.40 MMBtu/hr	HydroBlaster	5/3000EHGY	NA	1992	Condition IV.A (724)
IA03d-NG	Natural Gas Hot Water Pressure Washer 4	0.40 MMBtu/hr	HydroBlaster	5/3000EHGY	NA	1992	Condition IV.A (724)
IA39-NG	Natural Gas SX Pressure Washer	0.34 MMBtu/hr	Sioux	H4N2750	1801018	TBD	Condition IV.A (724)
C23b	Natural Gas Hot Water Heater	6.842 MMBtu/hr	QuikWater	8000-2M/900	NA	1996	Condition IV.A (724)
G5	Natural Gas Electrolyte Heater	5.44 MMBtu/hr	NA	NA	NA	2003	Condition IV.A (724)
SX-LCH1	LC Feed Hopper 1	NA	TBD	TBD	TBD	2022	Condition III.A (730)
SX-LCDC1	LC Dust Collector 1	400 acfm	TBD	TBD	TBD	2022	Condition III.A (730)
SX-LCSC1	LC Screw Conveyor 1	0.20 tph	TBD	TBD	TBD	2022	Condition III.A (730)
SX-LCMH1	LC Metered Hopper 1	NA	TBD	TBD	TBD	2022	Condition III.A (730)



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
SX-LCMSC1	LC Metered Screw Conveyor 1	NA	TBD	TBD	TBD	2022	Condition III.A (730)
SX-LCH2	LC Feed Hopper 2	NA	TBD	TBD	TBD	2022	Condition III.A (730)
SX-LCDC2	LC Dust Collector 2	400 acfm	TBD	TBD	TBD	2022	Condition III.A (730)
SX-LCSC2	LC Screw Conveyor 2	0.20 tph	TBD	TBD	TBD	2022	Condition III.A (730)
SX-LCMH2	LC Metered Hopper 2	NA	TBD	TBD	TBD	2022	Condition III.A (730)
SX-LCMSC2	LC Metered Screw Conveyor 2	NA	TBD	TBD	TBD	2022	Condition III.A (730)
Lime Storage and Handling Operations							
LHS-LSB1	Lime Storage Bin 1	500 tons	NA	NA	NA	1976	Condition III.A (730)
BV01	Lime Storage Bin 1 Bin Vent	3,500 cfm	FARR	GS4	NA	NA	Condition III.A (730)
LHS-LWF1	Lime Weigh Feeder 1	13 tph	NA	NA	NA	1976	Condition III.A (730)
LHS-GM1	Lime Grinding Mill 1	13 tph	Denver	NA	NA	1976	Condition III.A (730)



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
LHS-LWF2	Lime Weigh Feeder 2	13 tph	TBD	TBD	TBD	TBD	Condition III.A (730)
LHS-GM2	Lime Grinding Mill 2	13 tph	TBD	TBD	TBD	TBD	Condition III.A (730)
LHS-LSB2	Lime Storage Bin 2	700 tons	TBD	TBD	TBD	TBD	Condition III.A (730)
BV02	Lime Storage Bin 2 Bin Vent	3,500 cfm	FARR	GS4	NA	TBD	Condition III.A (730)
LHS-LWF3	Lime Weigh Feeder 3	13 tph	TBD	TBD	TBD	TBD	Condition III.A (730)
LHS-GM3	Lime Grinding Mill 3	13 tph	Denver	NA	NA	TBD	Condition III.A (730)
PoB1	Lime Porta Batch	9.60 tph	Lhoist	NA	varies	varies	Condition III.A (730)



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
Ammonium Nitrate Prill Delivery and Handling Operations							
PB1	Prill Bin 1	93.5 tons	NA	NA	NA	1990	Condition III.A (730)
PBV01	Prill Bin Vent 1 (no filter)	NA	NA	NA	NA	1990	Condition III.A (730)
PB2	Prill Bin 2	93.5 tons	NA	NA	NA	1990	Condition III.A (730)
PBV02	Prill Bin Vent 2 (no filter)	NA	NA	NA	NA	1990	Condition III.A (730)
PB4	Prill Bin 4	100 tons	NA	NA	NA	TBD	Condition III.A (730)
PBV04	Prill Bin Vent 4 (no filter)	NA	NA	NA	NA	TBD	Condition III.A (730)
PB5	Prill Bin 5	100 tons	NA	NA	NA	TBD	Condition III.A (730)
PBV05	Prill Bin Vent 5 (no filter)	NA	NA	NA	NA	TBD	Condition III.A (730)
Portable Aggregate System							
PASHG	Hopper with Vibrating Grizzly Feeder	850 tph	Deister	NA	NA	2015	Conditions V.A (722, Hopper) and V.B (OOO, Grizzly)



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
PASJC	Jaw Crusher	850 tph	Sandvik	CJ412	NA	2015	Condition V.B (OOO)
PASBC3	Jaw Crusher Discharge Conveyor	850 tph	SPEC	12347	NA	2015	Condition V.B (OOO)
PASBC1	Screen Feed Conveyor	850 tph	Superior Industries, Inc.	48X70TFC	1387020	November 2018	Condition V.B (OOO)
PASSC	Triple Deck Screen with Discharge Conveyor	850 tph	Deister	NA	NA	2015	Condition V.B (OOO)
PASBC2	Cone Feed Conveyor	850 tph	Superior Industries, Inc.	NA	NA	2015	Condition V.B (OOO)
PASCC	Cone Crusher with Discharge Conveyor	850 tph	Sandvik	CH440	NA	2015	Condition V.B (OOO)
PASST1	Coarse Stacking Conveyor	850 tph	Superior Industries, Inc.	NA	NA	2015	Conditions V.A (722, transfer from) and V.B (OOO, transfer to)
PASST2	Fines Stacking Conveyor	850 tph	Superior Industries, Inc.	NA	NA	2015	Conditions V.A (722, transfer from) and V.B (OOO, transfer to)
Mill Recycle Operations							
MRSscreen	¾" Non-Vibrating Type Screen	141.67 tph	TBD	TBD	TBD	TBD	Condition II.A (721)



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
Storage Tanks and Parts Cleaning							
150	Gasoline Storage Tank 150 (GDF1)	12,000 gal	NA	NA	NA	1996	Conditions VII.A (710) and VII.B (CCCCC) (10,000 - 100,000 gallon monthly throughput)
FT-3	Gasoline Storage Tank FT-3 (GDF2)	12,000 gal	NA	8'D x 32'L	NA	2008	Conditions VII.A (710) and VII.B (CCCCC) (10,000 - 100,000 gallon monthly throughput)
PrtC	Parts Cleaning Equipment	571 gal	NA	NA	NA	NA	Condition III.A (730)
T-XMS	Xanthate Mixing and Storage Tanks	TBD	NA	NA	NA	NA	Condition III.A (730)
Diesel Emergency ICE							
C39-D	Mulholland Wash Diesel Emergency Generator	374 hp engine	Caterpillar	3406 SR-4-C39	5G904009	1991	Conditions VI.A (719) and VI.D (ZZZZ)
C41-D	Mammoth Seepage Pond Diesel Emergency Generator	1,214 hp engine	Caterpillar	C27	TBD	2018	Conditions VI.B (III) and VI.E (ZZZZ)
IA04-D	Diesel Emergency Generator IA04-D	59 hp engine	Dayton	4W121	837532	1990	Conditions VI.A (719) and VI.D (ZZZZ)



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
IA05-D	Diesel Emergency Compressor IA05-D	525 hp engine	Sullair	1600HDAFTQ	004-144488	2004	Conditions VI.A (719) and VI.D (ZZZZ)
IA24-D	Diesel Emergency Generator IA24-D	762 hp engine	Caterpillar	D80-C15	C5E03893	2012	Conditions VI.B (III) and VI.E (ZZZZ)
IA25-D	Diesel Emergency Generator IA25-D	90 hp engine	Caterpillar	D60-6 C4.4	E5A02346	2013	Conditions VI.B (III) and VI.E (ZZZZ)
IA28-D	Diesel Emergency Generators IA28-D	900 hp engine	Caterpillar	C18	FST01186	2015	Conditions VI.B (III) and VI.E (ZZZZ)
IA36-D	Diesel Emergency Generator IA36-D	161 hp engine	Caterpillar	D100-8 C4.4 DITA	TBD	2017 or 2018	Conditions VI.B (III) and VI.E (ZZZZ)
IA42-D	Tailings Wing Dike Diesel Emergency Water Pump TLPUMP03	75 hp engine	John Deere	4045TF290A	15006010	2012	Conditions VI.B (III) and VI.E (ZZZZ)
IA43-D	Tailings Wing Dike Diesel Emergency Water Pump TLPUMP04	100 hp engine	Perkins	1104C-44T	RG51208 U165140L	2004	Conditions VI.A (719) and VI.D (ZZZZ)
IA44-D	Copper Cleaner Flotation Diesel Emergency Generator	480 hp engine	Caterpillar	C9	TBD	2020	Conditions VI.B (III) and VI.E (ZZZZ)
IA47-D	CLP Diesel Emergency Generator IA47-D	85.8 hp engine	Caterpillar	C4.4	E3165768	2022	Conditions VI.B (III) and VI.E (ZZZZ)



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
IA48-D	Mulholland Seepage Pond Diesel Emergency Generator IA48-D	398 hp engine	Caterpillar	C9	TBD	2021	Conditions VI.B (III) and VI.E (ZZZZ)
Diesel Non-Emergency ICE							
IA14-DN	Diesel Non-Emergency Generator IA14-DN	128 hp engine	Generac Power Systems	5161580200	2082580	2005	Conditions VI.A (719) and VI.G (ZZZZ)
IA15-DN	Diesel Non-Emergency Generator IA15-DN	130 hp engine	Caterpillar	D80-6	D4B01969	2010	Conditions VI.E (ZZZZ) and VI.F (III)
IA45-DN	Copper Creek Flood Basin Diesel Non-Emergency Pump Engine	28.2 hp engine	Perkins	CP4	NA	2018	Conditions VI.E (ZZZZ) and VI.F (III)
IA46-DN	Lime Porta Batch Diesel Non-Emergency Engine	135 hp engine	NA	NA	NA	2010	Conditions VI.E (ZZZZ) and VI.F (III)
Propane Emergency ICE							
IA16-P	Propane Emergency Generator IA16-P	13 hp engine	Generac Power Systems	0062450	8375562	2014	Conditions VI.C (JJJ) and VI.E (ZZZZ)
IA19-P	Propane Emergency Generator IA19-P	60 hp engine	Generac Power Systems	54210	5036335	6/16/2008	Conditions VI.A (719) and VI.E (ZZZZ)
IA21-P	Propane Emergency Generator IA21-P	80 hp engine	Generac Power Systems	SD050AG035	8596712	2014	Conditions VI.C (JJJ) and VI.E (ZZZZ)



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
IA31-P	Propane Emergency Generator IA31-P	30.52 hp engine	Generac Power Systems	64591	9613173	2015	Conditions VI.C (JJJJ) and VI.E (ZZZZ)
IA32-P	Propane Emergency Generator IA32-P	32 hp engine	Generac Power Systems	005885-0	6216057	2011	Conditions VI.C (JJJJ) and VI.E (ZZZZ)
IA37-P	Propane Emergency Generator IA37-P	113.18 hp engine	Caterpillar (PSI)	DG50-2 (PSI-GM 5.7L Turbo engine)	TBD	2019	Conditions VI.C (JJJJ) and VI.E (ZZZZ)
IA38-P	Propane Emergency Generator IA38-P	113.18 hp engine	Caterpillar (PSI)	DG50-2 (PSI-GM 5.7L Turbo engine)	TBD	2019	Conditions VI.C (JJJJ) and VI.E (ZZZZ)
Propane Non-Emergency ICE							
IA10-PN	Propane Non-Emergency Generator IA10-PN	27 hp engine	Generac Power Systems	0053360	4636845	2006	Conditions VI.A (719) and VI.G (ZZZZ)
IA18-PN	Propane Non-Emergency Generator IA18-PN	20 hp engine	Generac Power Systems	SG0047220	3702076	2003	Conditions VI.A (719) and VI.G (ZZZZ)
Natural Gas Emergency ICE							
IA13-NG	Natural Gas Emergency Generator IA13-NG	17 hp engine	Generac Power Systems	0052420	4479209	2005	Conditions VI.A (719) and VI.D (ZZZZ)
IA22-NG	Natural Gas Emergency Generator IA22-NG	199 hp engine	Detroit Brand MTU DD	130-GC6NL	MX-121236-0708	2011	Conditions VI.C (JJJJ) and VI.E (ZZZZ)



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
IA23-NG	Natural Gas Emergency Generator IA23-NG	192 hp engine	Generac Power Systems	QT1306KNAC	6346402	2011	Conditions VI.C (JJJJ) and VI.E (ZZZZ)
IA30-NG	Natural Gas Emergency Generator IA30-NG	40 hp engine	Cummins	C20N6	F150834056	2015	Conditions VI.C (JJJJ) and VI.E (ZZZZ)
IA33-NG	Natural Gas Emergency Generator IA33-NG	31.83 hp engine	Generac Power Systems	QT0224JNAX	6661542	2011	Conditions VI.C (JJJJ) and VI.E (ZZZZ)
IA34-NG	Natural Gas Emergency Generator IA34-NG	32 hp engine	Generac Power Systems	RG02224ANAX	3000378055	2016	Conditions VI.C (JJJJ) and VI.E (ZZZZ)



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
Miscellaneous Fuel Burning Equipment							
IA01-NG	Natural Gas Boiler IA01-NG	0.5115 MMBtu/hr	Teledyne Lannis	H3-0514	0511243305	2005	Condition IV.A (724)
IA02c-NG	Natural Gas Truck Wash Boiler IA02c-NG	0.361 MMBtu/hr	Hotsy	NA	NA	NA	Condition IV.A (724)
IA35-D	Diesel Pressure Washer IA35-D	0.3429 MMBtu/hr	Hotsy	1410SS	156517	12/2006	Condition IV.A (724)
IA40-NG	Natural Gas Mine Shop Pressure Washer 1	0.49 MMBtu/hr	EST	5231AEUL	NA	TBD	Condition IV.A (724)
IA41-NG	Natural Gas Mine Shop Pressure Washer 2	0.49 MMBtu/hr	EST	5231AEUL	NA	TBD	Condition IV.A (724)
IA26-NG	Natural Gas Small Space Heaters, Furnaces, and Boilers	9.10 MMBtu/hr (total)	varies	varies	varies	varies	Condition IV.A (724)
IA27-P	Propane Small Space Heaters, Furnaces, and Boilers	0.95 MMBtu/hr (total)	varies	varies	varies	varies	Condition IV.A (724)



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
AOS1: Two Concentrator Operations							
<i>Primary Crushing and Overland Conveying Operations (to Bagdad Concentrator) (AOS1)</i>							
RB	Rock Breaker (AOS1)	N/A	NA	NA	NA	NA	Conditions II.A (721) and II.D.1
PC2	Primary Crusher 2 (AOS1)	7,000 tph	Metso	60x89, MK-III	TBD	2019	Conditions II.B (LL) and II.D.1
C51	Dust Collector C51 (AOS1)	15,000 acfm	FARR	GS 36/30	NA	2013	Conditions II.C and II.D.1
PC2SB	PC2 Surge Bin (AOS1)	640 tons	Designed by M3	NA	NA	2005	Conditions II.A (721) and II.D.1
PC2AF	PC2 Apron Feeder (AOS1)	6,700 tph	Metso	84"	NA	2005	Conditions II.A (721) and II.D.1
PC2DC	PC2 Dribble Conveyor (AOS1)	N/A	Turner Engineering	60"	NA	2005	Conditions II.A (721) and II.D.1
OC3A	Overland Conveyor 3A (AOS1)	7,600 tph	NA	60"	NA	2005	Conditions II.A (721) and II.D.1
OC3	Overland Conveyor 3 (AOS1)	7,600 tph	NA	54"	NA	1975	Conditions II.A (721) and II.D.1
OC4	Overland Conveyor 4 (AOS1)	7,600 tph	NA	54"	NA	1975	Conditions II.A (721) and II.D.1



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
RST5	Radial Stacker 5 (AOS1)	7,600 tph	NA	60"	NA	1975	Conditions II.A (721) and II.D.1
FSS6	Free-Standing Stacker 6 (AOS1)	7,600 tph	NA	60"	NA	1990	Conditions II.A (721) and II.D.1
<i>Primary Crushing and Overland Conveying Operations (to Second Concentrator) (AOS1)</i>							
2110-RKB-0021	PC1 Rock Breaker (AOS1)	N/A	TBD	TBD	TBD	TBD	Conditions II.A (721) and II.D.1
2110-CRG-0021	Primary Crusher 1 (AOS1)	8,000 tph	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1
2140-DCD-0021	PC1 Dust Collector 1 (AOS1)	14,500 acfm	FARR	TBD	TBD	TBD	Conditions II.C and II.D.1
2110-BIN-0021	PC1 Surge Pocket (AOS1)	900 tons	TBD	TBD	TBD	TBD	Conditions II.A (721) and II.D.1
2110-FDA-0021	PC1 Discharge Apron Feeder (AOS1)	8,000 tph	TBD	TBD	TBD	TBD	Conditions II.A (721) and II.D.1
2140-CVB-0021	PC1 Discharge Conveyor (AOS1)	8,000 tph	TBD	TBD	TBD	TBD	Conditions II.A (721) and II.D.1
2140-CVB-0022	PC1 Cross Country Conveyor 1 (AOS1)	8,000 tph	TBD	TBD	TBD	TBD	Conditions II.A (721) and II.D.1
2140-DCD-0022	PC1 CCC1 Dust Collector 2 (AOS1)	16,700 acfm	FARR	TBD	TBD	TBD	Conditions II.C and II.D.1



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
2140-CVB-0023	PC1 Cross Country Conveyor 2 (AOS1)	8,000 tph	TBD	TBD	TBD	TBD	Conditions II.A (721) and II.D.1
2140-DCD-0023	PC1 CCC2 Dust Collector 3 (AOS1)	16,700 acfm	FARR	TBD	TBD	TBD	Conditions II.C and II.D.1
2140-CVB-0024	PC1 Cross Country Conveyor 3 (AOS1)	8,000 tph	TBD	TBD	TBD	TBD	Conditions II.A (721) and II.D.1
2140-DCD-0024	PC1 CCC3 Dust Collector 4 (AOS1)	16,700 acfm	FARR	TBD	TBD	TBD	Conditions II.C and II.D.1
<i>Second Concentrator Milling Operations (AOS1)</i>							
2210-FDA-0101	Coarse Ore Reclaim Feeder 1 (AOS1)	2,185 tph	TBD	TBD	TBD	TBD	Conditions II.A (721) and II.D.1
2210-FDA-0102	Coarse Ore Reclaim Feeder 2 (AOS1)	2,185 tph	TBD	TBD	TBD	TBD	Conditions II.A (721) and II.D.1
2210-FDA-0103	Coarse Ore Reclaim Feeder 3 (AOS1)	2,185 tph	TBD	TBD	TBD	TBD	Conditions II.A (721) and II.D.1
2210-CVB-0101	Coarse Ore Reclaim Conveyor 1 (AOS1)	4,954 tph	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1
2210-DCD-0101	Coarse Ore Reclaim Conveyor 1 Dust Collector 5 (AOS1)	22,000 acfm	FARR	TBD	TBD	TBD	Conditions II.C and II.D.1
2210-FDA-0201	Coarse Ore Reclaim Feeder 4 (AOS1)	2,185 tph	TBD	TBD	TBD	TBD	Conditions II.A (721) and II.D.1



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
2210-FDA-0202	Coarse Ore Reclaim Feeder 5 (AOS1)	2,185 tph	TBD	TBD	TBD	TBD	Conditions II.A (721) and II.D.1
2210-FDA-0203	Coarse Ore Reclaim Feeder 6 (AOS1)	2,185 tph	TBD	TBD	TBD	TBD	Conditions II.A (721) and II.D.1
2210-CVB-0201	Coarse Ore Reclaim Conveyor 2 (AOS1)	4,954 tph	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1
2210-DCD-0201	Coarse Ore Reclaim Conveyor 2 Dust Collector 6 (AOS1)	22,000 acfm	FARR	TBD	TBD	TBD	Conditions II.C and II.D.1
2310-MLA-0101	AG Mill 1 (AOS1)	4,954 tph	TBD	TBD	TBD	TBD	Conditions II.A (721) and II.D.1
2310-SCN-0101	AG Mill 1 Discharge Screen 1 (AOS1)	2,477 tph	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1
2310-SCN-0102	AG Mill 1 Discharge Screen 2 (AOS1)	2,477 tph	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1
2310-SCN-0103	AG Mill Rotatable Discharge Screen 1 (AOS1)	2,477 tph	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1
2340-MLB-0111	Ball Mill 1 (AOS1)	4,376 tph	TBD	TBD	TBD	TBD	Conditions II.A (721) and II.D.1
2310-MLA-0201	AG Mill 2 (AOS1)	4,954 tph	TBD	TBD	TBD	TBD	Conditions II.A (721) and II.D.1
2310-SCN-0201	AG Mill 2 Discharge Screen 1 (AOS1)	2,477 tph	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
2310-SCN-0202	AG Mill 2 Discharge Screen 2 (AOS1)	2,477 tph	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1
2310-SCN-0203	AG Mill Rotatable Discharge Screen 2 (AOS1)	2,477 tph	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1
2340-MLB-0211	Ball Mill 2 (AOS1)	4,376 tph	TBD	TBD	TBD	TBD	Conditions II.A (721) and II.D.1
2330-CVB-0121	Pebble Conveyor (AOS1)	4,080 tph	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1
2330-CVB-0122	HPGR Feed Bin Feed Conveyor (AOS1)	4,080 tph	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1
2330-DVT-0123	HPGR Feed Diverter (AOS1)	N/A	TBD	TBD	TBD	TBD	Conditions II.A (721) and II.D.1
2330-BIN-0130	HPGR Feed Bin (AOS1)	11,400 ft ³	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1
2330-FDB-0132	HPGR Belt Feeder (AOS1)	4,080 tph	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1
2330-CVB-0134	HPGR Feed Conveyor (AOS1)	5,626 tph	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1
2330-CRH-0140	High Pressure Grinding Roll (AOS1)	5,626 tph	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1
2330-DCD-0141	HPGR Discharge Dust Collector 7 (AOS1)	23,000 acfm	FARR	TBD	TBD	TBD	Conditions II.C and II.D.1



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
2330-CVB-0141	HPGR Discharge Conveyor 1 (AOS1)	5,626 tph	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1
2330-CVB-0142	HPGR Discharge Conveyor 2 (AOS1)	5,626 tph	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1
2330-DCD-0142	HPGR Discharge Conveyor Transfer Dust Collector 8 (AOS1)	27,000 acfm	FARR	TBD	TBD	TBD	Conditions II.C and II.D.1
2330-BIN-0150	HPGR Product Bin (AOS1)	20,700 ft ³	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1
2330-DCD-0150	HPGR Product Bin Dust Collector 9 (AOS1)	25,000 acfm	FARR	TBD	TBD	TBD	Conditions II.C and II.D.1
2330-FDB-0152	HPGR Product Recycle Feeder (AOS1)	1,546 tph	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1
2330-FDB-0163	HPGR Product Feeder 1 (AOS1)	2,040 tph	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1
2330-FDB-0263	HPGR Product Feeder 2 (AOS1)	2,040 tph	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1
2330-CVB-0163	HPGR Product Return Conveyor 1 (AOS1)	2,040 tph	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1
2330-DCD-0163	HPGR Product Transfer Dust Collector 10 (AOS1)	10,000 acfm	FARR	TBD	TBD	TBD	Conditions II.C and II.D.1
2330-CVB-0263	HPGR Product Return Conveyor 2 (AOS1)	2,040 tph	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
2330-DCD-0263	HPGR Product Transfer Dust Collector 11 (AOS1)	10,000 acfm	FARR	TBD	TBD	TBD	Conditions II.C and II.D.1



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
<i>Second Concentrator Bulk and Molybdenum Flotation Operations (AOS1)</i>							
S-FLO-B	Second Concentrator Bulk Flotation Equipment (AOS1)	59.1 tph total conc.	TBD	TBD	TBD	TBD	Conditions II.A (721), III.A (730), and II.D.1
2420-MLV-0303	Second Concentrator Regrind Mill 1 (AOS1)	250 tph	TBD	TBD	TBD	TBD	Conditions II.A (721) and II.D.1
2420-MLV-0304	Second Concentrator Regrind Mill 2 (AOS1)	250 tph	TBD	TBD	TBD	TBD	Conditions II.A (721) and II.D.1
S-FLO-M	Second Concentrator Molybdenum Flotation Equipment (AOS1)	59.1 tph total conc.	TBD	TBD	TBD	Varies	Conditions II.A (721), III.A (730), and II.D.1
<i>Second Concentrator Concentrate Handling Operations (AOS1)</i>							
2630-SCN-0410	Copper Filter Feed Tank Trash Screen (AOS1)	57 tph	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1
2520-SCN-0517	Molybdenum Thickener Trash Screen (AOS1)	N/A	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1
2520-HPR-0576	Molybdenum Concentrate Filter Discharge Hopper 1 (AOS1)	N/A	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1
2520-HPR-0577	Molybdenum Concentrate Filter Discharge Hopper 2 (AOS1)	N/A	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
2520-CVS-0576	Molybdenum Concentrate Dryer Screw Feeder (AOS1)	2.1 tph	TBD	TBD	TBD	TBD	Conditions II.A (721) and II.D.1
2520-DRY-0576	Molybdenum Concentrate Dryer (AOS1)	2.1 tph	Holoflite	TBD	TBD	TBD	Conditions II.A (721) and II.D.1
2520-SCU-0576	Molybdenum Dryer Wet Scrubber System (AOS1)	337 acfm	TBD	TBD	TBD	TBD	Conditions II.C and II.D.1
2520-BIN-0576	Dried Molybdenum Concentrate Storage Bin (AOS1)	2.6 tons	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1
2520-SYS-0576	Molybdenum Concentrate Bagging System (AOS1)	2.1 tph	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.1
<i>Second Concentrator Lime and Other Regent Operations (AOS1)</i>							
2360-SLO-0140	Second Concentrator Lime Silo (AOS1)	617 tons	TBD	TBD	TBD	TBD	Conditions III.A (730) and II.D.1
2360-BGH-0141	Second Concentrator Lime Silo Baghouse (AOS1)	590 ft3	TBD	TBD	TBD	TBD	Conditions III.A (730) and II.D.1
2360-FDR-0140	Second Concentrator Lime Screw Feeder (AOS1)	19.5 tph	TBD	TBD	TBD	TBD	Conditions III.A (730) and II.D.1
2360-MLV-0140	Second Concentrator Lime Slaker (AOS1)	11.36 tph	TBD	TBD	TBD	TBD	Conditions III.A (730) and II.D.1
2360-SCU-0140	Second Concentrator Lime System Scrubber (AOS1)	4,400 scfm	TBD	TBD	TBD	TBD	Conditions III.A (730) and II.D.1



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
2720-BIN-0720	Tailings Flocculant Bag Breaker Bin (AOS1)	2.0 tons	TBD	TBD	TBD	TBD	Conditions III.A (730) and II.D.1
2720-FDR-0720	Tailings Flocculant Screw Feeder (AOS1)	0.83 tph	TBD	TBD	TBD	TBD	Conditions III.A (730) and II.D.1
2510-BIN-0580	Concentrate Flocculant Bag Breaker Bin (AOS1)	1.0 tons	TBD	TBD	TBD	TBD	Conditions III.A (730) and II.D.1
2510-FDR-0580	Concentrate Flocculant Screw Feeder (AOS1)	0.06 tph	TBD	TBD	TBD	TBD	Conditions III.A (730) and II.D.1
2440-TNK-0150	Xanthate Mix Tank (AOS1)	1,575 ft3	TBD	TBD	TBD	TBD	Conditions III.A (730) and II.D.1
2440-TNK-0152	Xanthate Holding Tank (AOS1)	2,040 ft3	TBD	TBD	TBD	TBD	Conditions III.A (730) and II.D.1
2440-TNK-0160	Test Reagent Mix Tank (AOS1)	1,575 ft3	TBD	TBD	TBD	TBD	Conditions III.A (730) and II.D.1
2440-TNK-0162	Test Reagent Holding Tank (AOS1)	2,040 ft3	TBD	TBD	TBD	TBD	Conditions III.A (730) and II.D.1
2520-TNK-0591	NaHS Storage Tank (AOS1)	7,540 ft3	TBD	TBD	TBD	TBD	Conditions III.A (730) and II.D.1
2520-TNK-0592	NaHS Distribution Tank (AOS1)	700 ft3	TBD	TBD	TBD	TBD	Conditions III.A (730) and II.D.1
2520-SCU-0591	Second Concentrator NaHS System Scrubber (AOS1)	735 acfm	TBD	TBD	TBD	TBD	Conditions III.A (730) and II.D.1



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
<i>Second Concentrator Prill Handling Operations (AOS1)</i>							
PB6	Prill Bin 6 (AOS1)	100 tons	TBD	TBD	TBD	TBD	Conditions III.A (730) and II.D.1
<i>Second Concentrator Emergency ICE (AOS1)</i>							
2440-GEN-0101	Second Concentrator Diesel Emergency Generator 1 (AOS1)	609 hp engine	Caterpillar	C13	TBD	TBD	Conditions VI.B (III), VI.E (ZZZZ), and II.D.1
2500-GEN-0501	Second Concentrator Diesel Emergency Generator 2 (AOS1)	762 hp engine	Caterpillar	C15	TBD	TBD	Conditions VI.B (III), VI.E (ZZZZ), and II.D.1
3650-GEN-0801	Second Concentrator Propane Emergency Generator 1 (AOS1)	84.70 hp engine	Cummins	QSJ5.9G-G1	TBD	2023	Conditions VI.C (JJJ), VI.E (ZZZZ), and II.D.1
3650-GEN-0802	Second Concentrator Propane Emergency Generator 2 (AOS1)	84.70 hp engine	Cummins	QSJ5.9G-G1	TBD	2023	Conditions VI.C (JJJ), VI.E (ZZZZ), and II.D.1
AOS3: Upgrades to Milling Operations							
<i>Grinding Line 1</i>							



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
GL1-BCB	GL1 Belt Conveyor B (AOS3)	1,300 tph	NA	48"	NA	1976	Conditions II.A (721) and II.D.2
GL1-SC1	GL1 Secondary Crusher (AOS3)	1,450 tph	Metso	MP1250	TBD	TBD	Conditions II.B (LL) and II.D.2
<i>Grinding Line 2</i>							
GL2-BCB	GL2 Belt Conveyor B (AOS3)	1,300 tph	NA	48"	NA	1976	Conditions II.A (721) and II.D.2
GL2-SC2	GL2 Secondary Crusher (AOS3)	1,450 tph	Metso	MP1250	TBD	TBD	Conditions II.B (LL) and II.D.2
<i>Grinding Line 3</i>							
GL3-BCB	GL3 Belt Conveyor B (AOS3)	1,300 tph	NA	48"	NA	1976	Conditions II.A (721) and II.D.2
GL3-SC3	GL3 Secondary Crusher (AOS3)	1,450 tph	Metso	MP1250	TBD	TBD	Conditions II.B (LL) and II.D.2
<i>Grinding Line 4</i>							
GL4-BCB	GL4 Belt Conveyor B (AOS3)	1,300 tph	NA	48"	NA	1981	Conditions II.A (721) and II.D.2
GL4-SC4	GL4 Secondary Crusher (AOS3)	1,450 tph	Metso	MP1250	TBD	TBD	Conditions II.B (LL) and II.D.2
<i>Grinding Line 5</i>							



Equip. ID Number	Equipment Name	Maximum Capacity	Make	Model	Serial Number	Date of Manufacture	Applicable Attachment "B" Section or Condition
GL5-BCB	GL5 Belt Conveyor B (AOS3)	1,300 tph	NA	48"	NA	1988	Conditions II.B (LL) and II.D.2
GL5-SC5	GL5 Secondary Crusher (AOS3)	1,450 tph	Metso	MP1250	TBD	TBD	Conditions II.B (LL) and II.D.2
AOS5: Emergency Grizzly Systems							
EG1	EGS Bar Grizzly 1 (AOS5)	5,000 tph	TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.3
EG2	EGS Bar Grizzly 2 (AOS5)		TBD	TBD	TBD	TBD	Conditions II.B (LL) and II.D.3
EGAF1	EGS Apron Feeder 1 (AOS5)	5,000 tph	TBD	TBD	TBD	TBD	Conditions II.A (721) and II.D.3
EGAF2	EGS Apron Feeder 2 (AOS5)		TBD	TBD	TBD	TBD	Conditions II.A (721) and II.D.3
EGBC1	EGS Belt Conveyor 1 (AOS5)	5,000 tph	TBD	TBD	TBD	TBD	Conditions II.A (721) and II.D.3
EGBC2	EGS Belt Conveyor 2 (AOS5)		TBD	TBD	TBD	TBD	Conditions II.A (721) and II.D.3

N/A – Not Applicable
 NA – Not Available
 TBD – To Be Determined

ATTACHMENT “D”: PROCESSES WITH VOLUNTARY EMISSION LIMITATIONS

Process Number	Pollution Control Device Controlling the Process	Emission Unit(s) Associated with the Process	Attachment “B” Permit Condition Reference for Performance Testing Requirements
Section A (PM/PM₁₀ ≤ 0.0135 gr/dscf)			
001-1	Scrubber C18	<ul style="list-style-type: none"> • Primary Crusher 1 	Condition II.C.3
		<ul style="list-style-type: none"> • Primary Crusher 1 to PC1 Surge Bin 	
001-5	Dust Collector C51	<ul style="list-style-type: none"> • Primary Crusher 2 	Condition II.C.3
		<ul style="list-style-type: none"> • Primary Crusher 2 to PC2 Surge Bin 	
		<ul style="list-style-type: none"> • PC2 Surge Bin to PC2 Apron Feeder 	
		<ul style="list-style-type: none"> • PC2 Apron Feeder to Overland Conveyor 3A 	
		<ul style="list-style-type: none"> • PC2 Apron Feeder to PC2 Dribble Conveyor 	
		<ul style="list-style-type: none"> • PC2 Dribble Conveyor to Overland Conveyor 3A 	
001-5 (AOS1)	Dust Collector C51 (AOS1)	<ul style="list-style-type: none"> • Primary Crusher 2 (AOS1) 	Condition II.C.3
		<ul style="list-style-type: none"> • Primary Crusher 2 (AOS1) to PC2 Surge Bin (AOS1) 	



Process Number	Pollution Control Device Controlling the Process	Emission Unit(s) Associated with the Process	Attachment "B" Permit Condition Reference for Performance Testing Requirements
Section A (PM/PM₁₀ ≤ 0.0135 gr/dscf) (cont'd)			
001-5 (AOS1) (cont'd)	Dust Collector C51 (AOS1) (cont'd)	• PC2 Surge Bin (AOS1) to PC2 Apron Feeder (AOS1)	Condition II.C.3 (cont'd)
		• PC2 Apron Feeder (AOS1) to Overland Conveyor 3A (AOS1)	
		• PC2 Apron Feeder (AOS1) to PC2 Dribble Conveyor (AOS1)	
		• PC2 Dribble Conveyor (AOS1) to Overland Conveyor 3A (AOS1)	
Section B (PM/PM₁₀ ≤ 0.0124 gr/dscf)			
002-1	GL1 Dust Collector C1	• GL1 Vibrating Feeders 2/5 to GL1 Belt Conveyor A (also includes emissions from Coarse Ore Stockpile 1 to GL1 Vibrating Feeders 2/5 that are contained within the enclosure)	Condition II.C.3
		• GL1 Secondary Crusher	
		• GL1 Secondary Crusher to GL1 Belt Conveyor A	
		• GL1 Belt Conveyor 5 to GL1 Belt Conveyor A (negligible emissions due to cleaned, washed ore being transferred)	



Process Number	Pollution Control Device Controlling the Process	Emission Unit(s) Associated with the Process	Attachment "B" Permit Condition Reference for Performance Testing Requirements
Section B (PM/PM₁₀ ≤ 0.0124 gr/dscf) (cont'd)			
002-2	GL2 Dust Collector C2	<ul style="list-style-type: none"> • GL2 Vibrating Feeders 2/5 to GL2 Belt Conveyor A (also includes emissions from Coarse Ore Stockpile 2 to GL2 Vibrating Feeders 2/5 that are contained within the enclosure) 	Condition II.C.3
		<ul style="list-style-type: none"> • GL2 Secondary Crusher 	
		<ul style="list-style-type: none"> • GL2 Secondary Crusher to GL2 Belt Conveyor A 	
		<ul style="list-style-type: none"> • GL2 Belt Conveyor 5 to GL2 Belt Conveyor A (negligible emissions due to cleaned, washed ore being transferred) 	
002-3	GL3 Dust Collector DC3	<ul style="list-style-type: none"> • GL3 Vibrating Feeders 2/5 to GL3 Belt Conveyor A (also includes emissions from Coarse Ore Stockpile 3 to GL3 Vibrating Feeders 2/5 that are contained within the enclosure) 	Condition II.C.3
		<ul style="list-style-type: none"> • GL3 Secondary Crusher 	
		<ul style="list-style-type: none"> • GL3 Secondary Crusher to GL3 Belt Conveyor A 	
		<ul style="list-style-type: none"> • GL3 Belt Conveyor 5 to GL3 Belt Conveyor A (negligible emissions due to cleaned, washed ore being transferred) 	



Process Number	Pollution Control Device Controlling the Process	Emission Unit(s) Associated with the Process	Attachment "B" Permit Condition Reference for Performance Testing Requirements
Section B (PM/PM₁₀ ≤ 0.0124 gr/dscf) (cont'd)			
002-4	GL4 Dust Collector DC4	<ul style="list-style-type: none"> • GL4 Vibrating Feeders 2/5 to GL4 Belt Conveyor A (also includes emissions from Coarse Ore Stockpile 4 to GL4 Vibrating Feeders 2/5 that are contained within the enclosure) 	Condition II.C.3
		<ul style="list-style-type: none"> • GL4 Secondary Crusher 	
		<ul style="list-style-type: none"> • GL4 Secondary Crusher to GL4 Belt Conveyor A 	
		<ul style="list-style-type: none"> • GL4 Belt Conveyor 5 to GL4 Belt Conveyor A (negligible emissions due to cleaned, washed ore being transferred) 	
Section C (PM/PM₁₀ ≤ 0.0085 gr/dscf)			
TBD	TBD	TBD	--



Process Number	Pollution Control Device Controlling the Process	Emission Unit(s) Associated with the Process	Attachment "B" Permit Condition Reference for Performance Testing Requirements
Section D (PM/PM₁₀ ≤ 0.004 gr/dscf)			
006-9	Filtered Concentrate Dust Collector CuDC	<ul style="list-style-type: none"> • Copper concentrate to Filtered Concentrate Feed Bin via Front-End Loader 	Condition II.C.3
		<ul style="list-style-type: none"> • Filtered Concentrate Screw Feeder to Filtered Concentrate Loadout Conveyor 	
002-6	GL5 Dust Collector DC5	<ul style="list-style-type: none"> • GL5 Vibrating Feeders 2/5 to GL5 Belt Conveyor A (also includes emissions from Coarse Ore Stockpile 5 to GL5 Vibrating Feeders 2/5 that are contained within the enclosure) 	Condition II.C.3
		<ul style="list-style-type: none"> • GL5 Secondary Crusher 	
		<ul style="list-style-type: none"> • GL5 Secondary Crusher to GL5 Belt Conveyor A • GL5 Belt Conveyor 5 to GL5 Belt Conveyor A (negligible emissions due to cleaned, washed ore being transferred) 	
Section E (PM/PM₁₀ ≤ 0.003 gr/dscf)			
TBD	TBD	<ul style="list-style-type: none"> • TBD 	--



Process Number	Pollution Control Device Controlling the Process	Emission Unit(s) Associated with the Process	Attachment "B" Permit Condition Reference for Performance Testing Requirements
Section F (PM/PM₁₀ ≤ 0.0023 gr/dscf)			
001-12 (AOS1)	PC1 Dust Collector 1 (AOS1)	<ul style="list-style-type: none"> • Primary Crusher 1 (AOS1) • Primary Crusher 1 (AOS1) to PC1 Surge Pocket (AOS1) • PC1 Surge Pocket (AOS1) to PC1 Discharge Apron Feeder (AOS1) • PC1 Discharge Apron Feeder (AOS1) to PC1 Discharge Conveyor (AOS1) 	Condition II.C.3
001-13 (AOS1)	PC1 CCC1 Dust Collector 2 (AOS1)	<ul style="list-style-type: none"> • PC1 Discharge Conveyor (AOS1) to PC1 Cross Country Conveyor 1 (AOS1) 	Condition II.C.3
001-14 (AOS1)	PC1 CCC2 Dust Collector 3 (AOS1)	<ul style="list-style-type: none"> • PC1 Cross Country Conveyor 1 (AOS1) to PC1 Cross Country Conveyor 2 (AOS1) 	Condition II.C.3
001-15 (AOS1)	PC1 CCC3 Dust Collector 4 (AOS1)	<ul style="list-style-type: none"> • PC1 Cross Country Conveyor 2 (AOS1) to PC1 Cross Country Conveyor 3 (AOS1) 	Condition II.C.3
002-7 (AOS1)	Coarse Ore Reclaim Conveyor 1 Dust Collector 5 (AOS1)	<ul style="list-style-type: none"> • Coarse Ore Reclaim Feeder 1 (AOS1) to Coarse Ore Reclaim Conveyor 1 (AOS1) • Coarse Ore Reclaim Feeder 2 (AOS1) to Coarse Ore Reclaim Conveyor 1 (AOS1) 	Condition II.C.3



Process Number	Pollution Control Device Controlling the Process	Emission Unit(s) Associated with the Process	Attachment "B" Permit Condition Reference for Performance Testing Requirements
Section F (PM/PM₁₀ ≤ 0.0023 gr/dscf) (cont'd)			
002-7 (AOS1) (cont'd)	Coarse Ore Reclaim Conveyor 1 Dust Collector 5 (AOS1) (cont'd)	<ul style="list-style-type: none"> • Coarse Ore Reclaim Feeder 3 (AOS1) to Coarse Ore Reclaim Conveyor 1 (AOS1) • HPGR Product Return Conveyor 1 (AOS1) to Coarse Ore Reclaim Conveyor 1 (AOS1) 	Condition II.C.3 (cont'd)
002-8 (AOS1)	Coarse Ore Reclaim Conveyor 2 Dust Collector 6 (AOS1)	<ul style="list-style-type: none"> • Coarse Ore Reclaim Feeder 4 (AOS1) to Coarse Ore Reclaim Conveyor 2 (AOS1) • Coarse Ore Reclaim Feeder 5 (AOS1) to Coarse Ore Reclaim Conveyor 2 (AOS1) • Coarse Ore Reclaim Feeder 6 (AOS1) to Coarse Ore Reclaim Conveyor 2 (AOS1) • HPGR Product Return Conveyor 2 (AOS1) to Coarse Ore Reclaim Conveyor 2 (AOS1) 	Condition II.C.3
002-9 (AOS1)	HPGR Discharge Dust Collector 7 (AOS1)	<ul style="list-style-type: none"> • HPGR Feed Conveyor (AOS1) to High Pressure Grinding Roll (AOS1) and Operation of the High Pressure Grinding Roll (AOS1) • High Pressure Grinding Roll (AOS1) to HPGR Discharge Conveyor 1 (AOS1) • HPGR Product Recycle Feeder (AOS1) to HPGR Feed Conveyor (AOS1) 	Condition II.C.3
002-10 (AOS1)	HPGR Discharge Conveyor Transfer Dust Collector 8 (AOS1)	<ul style="list-style-type: none"> • HPGR Discharge Conveyor 1 (AOS1) to HPGR Discharge Conveyor 2 (AOS1) 	Condition II.C.3



Process Number	Pollution Control Device Controlling the Process	Emission Unit(s) Associated with the Process	Attachment "B" Permit Condition Reference for Performance Testing Requirements
002-11 (AOS1)	HPGR Product Bin Dust Collector 9 (AOS1)	• HPGR Discharge Conveyor 2 (AOS1) to HPGR Product Bin (AOS1)	Condition II.C.3
002-12 (AOS1)	HPGR Product Transfer Dust Collector 10 (AOS1)	• HPGR Product Feeder 1 (AOS1) to HPGR Product Return Conveyor 1 (AOS1)	Condition II.C.3
002-13 (AOS1)	HPGR Product Transfer Dust Collector 11 (AOS1)	• HPGR Product Feeder 2 (AOS1) to HPGR Product Return Conveyor 2 (AOS1)	Condition II.C.3
Section G (PM/PM₁₀ ≤ 0.002 gr/dscf)			
TBD	TBD	• TBD	--
Section H (PM/PM₁₀ ≤ 0.001 gr/dscf)			
TBD	TBD	• TBD	--
Section I (PM/PM₁₀ ≤ 2.75 lb/hr)			
042-4	Primary Venturi Scrubber CH-02 and Secondary Venturi Scrubber CH-03	• Pressure Leach Vessel	Condition III.B.3
Section J (VOC ≤ 1.36 lb/hr)			
047-5	Venturi Scrubber / Venturi Scrubber (alternate), Packed Scrubber 1, Packed Scrubber 2, and Natural Gas Flare	• Steam Deoiler	Condition III.B.3