

CLASS II AIR QUALITY PERMIT

DRAFT PERMIT No. 87750

PERMITTEE: BHP Copper, Inc.
FACILITY: BHP Miami Unit
PLACE ID: 14620
DATE ISSUED: Date Pending
EXPIRY DATE: Date Pending

SUMMARY

This Class II permit is issued to BHP Copper, Inc., the Permittee, for the continued operation of a solvent extraction and electrowinning facility. The facility is located at 200 E. Line Oak Street, Miami, AZ 85539 in Gila County. This permit renews and supersedes Permit No. 63722.

The facility has the potential to emit (PTE) criteria pollutants below major source thresholds, but above permitting exemption thresholds for volatile organic compounds (VOCs). Therefore, a Class II permit is required per Arizona Administrative Code (A.A.C.) R18-2-302.B.2.

This permit is issued in accordance with the 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 in this permit conform to those in A.A.C. R18-2-101 et. seq. and Title 40 of the CFR, except as otherwise defined in this permit.

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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:

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

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.

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

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

V. FEE PAYMENT

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

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

VI. ANNUAL EMISSION INVENTORY QUESTIONNAIRE

A. The Permittee shall complete and submit to the Director an annual emissions inventory questionnaire. The questionnaire is due by March 31st or ninety (90) days after the Director makes the inventory form available each year, whichever occurs later, and shall include emission information for the previous calendar year.

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

B. The questionnaire shall be on a form provided by the Director and shall include the information required by A.A.C. R18-2-327.B.

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

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 February 15th, and shall report the compliance status of the source during the period between January 1st and December 31st of the previous 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 certification shall identify each deviation (including any deviations reported pursuant to Condition XII.B of this Attachment) and take it into account in the compliance certification.
[A.A.C. R18-2-309.2.c.iii]
 4. For emission units subject to 40 CFR Part 64, the certification shall also identify as possible exceptions to compliance any period during which compliance is required and in which an excursion or exceedance defined under 40 CFR Part 64 occurred;
[A.A.C. R18-2-309.2.c.iii]
 5. 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 (6) 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 (12) 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:

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

(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.

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 (2) working days of discovery of the deviation is prompt for deviations of permit conditions identified by Condition I.C.1 of Attachment “B”;
[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 Arizona Department of Environmental Quality myDEQ online portal.
[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 (2) 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 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 XII.D.3, 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:

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. 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]

XV. 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;

[A.A.C. R18-2-317.01]

- B.** Administrative Permit Amendment;

[A.A.C. R18-2-318]

- C.** Minor Permit Revision; and

[A.A.C. R18-2-319]

- D.** Significant Permit Revision.

[A.A.C. R18-2-320]

The applicability and requirements for such action are defined in the above referenced regulations.

XVI. 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 XVI.B and XVI.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 XVI.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 XVI.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 XVI.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 XVI.B and C, the source shall comply with Condition XVI.C. If a source change is described under both Condition XVI.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 XVI.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 XVI.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.

XVII. 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.** Operating 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 test is performed, or as otherwise provided 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 XVII.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 XVII.H.1, 2, and 3 above, the Permittee remains subject to the requirements of Section XVII.

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

5. For purposes of this Section XVII, 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]

XVIII. 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]

XIX. 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]

XX. 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 XV.B 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]

XXI. 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]

XXII. 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 Regulations.

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

ATTACHMENT "B": SPECIFIC CONDITIONS

I. FACILITY-WIDE REQUIREMENTS

A. Operating Limitation

1. The Permittee shall operate and maintain each piece of equipment identified in Attachment "C" in accordance with vendor-supplied operations and maintenance instructions. If vendor-supplied operations and maintenance instructions are not available or not applicable, the Permittee shall prepare an Operations and Maintenance plan, which shall contain adequate information to properly operate and maintain the equipment.

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

2. Recordkeeping Requirements

- a. The Permittee shall maintain on-site records of the manufacturer's specifications for each piece of equipment listed in Attachment "C".

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

- b. The Permittee shall keep records of all maintenance activities carried out on each piece of equipment listed in Attachment "C". These records shall include the type of maintenance activity performed and its duration, including the date, starting time, and ending time of each maintenance activity.

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

B. Opacity

1. Instantaneous Surveys and Six-Minute Observations

- a. Instantaneous Surveys

Any instantaneous survey required by this permit shall be determined by either option listed in Conditions I.A.1.a(1) and (2):

[A.A.C. R18-2-311.b]

- (1) Alternative Method ALT-082 (Digital Camera Operating Technique)

- (a) The Permittee, or Permittee representative, shall be certified in the use of Alternative Method ALT-082.

- (b) The results of all instantaneous surveys and six-minute observations shall be obtained within 30 minutes.

- (2) EPA Reference Method 9 Certified Observer.

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

- b. Six-Minute Observations

I. FACILITY-WIDE REQUIREMENTS

Any six-minute observation required by this permit shall be determined by either option listed in Conditions I.A.1.b(1) and (2):

[A.A.C. R18-2-311.b]

(1) Alternative Method ALT-082 (Digital Camera Operating Technique)

(a) The Permittee, or Permittee representative, shall be certified in the use of Alternative Method ALT-082.

(b) The results of all instantaneous surveys and six-minute observations shall be obtained within 30 minutes.

(2) EPA Reference Method 9.

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

c. The Permittee shall have on site or on call a person certified in EPA Reference Method 9 unless all 6-minute Method 9 observations required by this permit are conducted as a 6-minute Alternative Method-082 (Digital Camera Operating Technique) and all instantaneous visual surveys required by this permit are conducted as an instantaneous Alt-082 camera survey. Any 6-minute Method 9 observation required by this permit can be conducted as a 6-minute Alternative Method-082 and any instantaneous visual survey required by this permit can be conducted as an instantaneous Alt-082 camera survey.

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

2. Monitoring, Recordkeeping, and Reporting Requirements

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

a. At the frequency specified in the following sections of this permit, the Permittee shall conduct an instantaneous survey of visible emissions from both process stack sources, when in operation, and fugitive dust sources.

b. If the visible emissions on an instantaneous basis appears less than or equal to the applicable opacity standard, then the Permittee shall keep a record of the name of the observer, the date on which the instantaneous survey was made, and the results of the instantaneous survey.

c. If the visible emissions on an instantaneous basis appears greater than the applicable opacity standard, then the Permittee shall immediately conduct a six-minute observation of the visible emissions.

(1) If the six-minute observation of the visible emissions is less than or equal to the applicable opacity standard, then the Permittee shall record the name of the observer, the date on which the six-minute observation was made, and the results of the six-minute observation.

- (2) If the six-minute observation of the visible emissions is greater than the applicable opacity standard, then the Permittee shall do the following:
 - (a) Adjust or repair the controls or equipment to reduce opacity to less than or equal to the opacity standard;
 - (b) Record the name of the observer, the date on which the six-minute observation was made, the results of the six-minute observation, and all corrective action taken; and
 - (c) Report the event as an excess emission for opacity in accordance with Condition XII.A of Attachment "A".
 - (d) Conduct another six-minute observation to document the effectiveness of the adjustments or repairs completed.

C. Reporting Requirement

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]

1. Condition II.D.1
2. Condition II.D.2
3. Condition V.D.2
4. Condition V.D.3

II. SOLVENT EXTRACTION/ELECTROWINNING PROCESS REQUIREMENTS (SX/EW)

A. Applicability

This Section is applicable to the SX/EW circuits identified in Attachment "C" as subject to A.A.C. R18-2-730 for Unclassified Sources.

B. Operating Limitations

1. The Permittee shall not operate more than 60 electrowinning cells at any one time.
[A.A.C. R18-2-306.A.2 and -331.A.3.a]
[Material permit conditions are indicated by underlines and italics]
2. The Permittee shall not operate the EW plant with more than 17 amps per square foot (A/ft²).
[A.A.C. R18-2-306.A.2 and -331.A.3.a]
[Material permit conditions are indicated by underlines and italics]

C. Emission Standards

1. The Permittee shall not emit gaseous or odorous materials from equipment, operations or premises associated with the SX/EW process in such quantities or concentrations as to cause air pollution.
[A.A.C. R18-2-730.D]
2. Materials including solvents or other volatile compounds, acids and alkalis utilized in the SX/EW process 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 other equipment shall be mandatory.
[A.A.C. R18-2-730.F]
3. 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. Air Pollution Control Requirements

1. *In the SX plant, the Permittee shall use low vapor pressure solvents, or any other effective means of controlling emissions approved by the Director.*
[A.A.C. R18-2-306.A.2 and -331.A.3.e]
[Material permit conditions are indicated by underlines and italics]
2. *In the EW tank house, the Permittee shall use any of the following methods to control sulfuric acid emissions:*
[A.A.C. R18-2-306.A.2 and -331.A.3.e]
[Material permit conditions are indicated by underlines and italics]
 - a. *Foam;*
 - b. *Blankets;*
 - c. *Surfactants;*
 - d. *Thermal retention balls;*
 - e. *Any other effective means of controlling sulfuric acid emissions approved by the Director.*

E. Monitoring, Reporting, and Recordkeeping Requirements

1. On a daily basis, the Permittee shall keep records of the number of electrowinning cells in operation and the electric current density to show compliance with Conditions II.B.1 and II.B.2 above.
[A.A.C. R18-2-306.A.3.c]

2. The Permittee shall maintain a record of the control measures used to limit emissions from the SX/EW process as described in Subsection II.D above.
[A.A.C. R18-2-306.A.3.c]

F. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-730.D, F and G.

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

III. BOILER REQUIREMENTS

A. Applicability

This Section is applicable to the boiler identified in Attachment “C” as subject to the Standards of Performance for New Stationary Sources Subpart Dc for Small Industrial-Commercial-Institutional Steam Generating Units.

B. Fuel Limitation

The Permittee shall burn only natural gas in the boiler.

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

C. Monitoring and Recordkeeping Requirements

1. The Permittee shall record and maintain records of the amount of fuel combusted during each operating day.

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

2. All records required by Condition III.C.1 above shall be maintained by the Permittee for a period of two (2) years following the date of such record.

[40 CFR 60.48c(i)]

D. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with 40 CFR 60.48c(g)(1) and (i).

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

IV. EMERGENCY INTERNAL COMBUSTION ENGINE (ICE) SUBJECT TO NSPS REQUIREMENTS

A. Applicability

This Section is applicable to the emergency ICE identified in Attachment “C” as subject to the New Source Performance Standards (NSPS) Subpart IIII for Stationary Compression Ignition Internal Combustion Engines.

B. Fuel Limitations

1. The Permittee must use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel. The requirements of 40 CFR 1090.305 for nonroad diesel fuel are listed below:

[40 CFR 60.4207(b)]

 - a. Maximum sulfur content of 15 ppm.

[40 CFR 1090.305(b)]
 - b. Minimum cetane index of 40 or maximum aromatic content of 35 volume percent.

[40 CFR 1090.305(c)(1) and (2)]

2. Recordkeeping Requirements

The Permittee shall keep records of diesel supplier certification. These records shall include:

- a. The name of the diesel supplier;

[A.A.C. R18-2-306.A.3.c]
- b. The sulfur content of the diesel from which the shipment came;

[A.A.C. R18-2-306.A.3.c]
- c. The method used to determine the sulfur content of the diesel; and

[A.A.C. R18-2-306.A.3.c]
- d. The cetane index or aromatic content of the diesel.

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

These records shall be made available to ADEQ upon request.

C. General Requirements

1. The Permittee must comply with the emission standards for new non-road emergency ICEs in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later with a displacement of less than 30 liters per cylinder.

[40 CFR 60.4205(b)]
2. The Permittee shall operate and maintain the emergency ICE to comply with the emission standards required in Condition V.B.3.a over the entire life of the emergency ICE.

[40 CFR 60.4206]

D. Operating Requirements

1. The Permittee shall operate the emergency ICE according to the requirements in Conditions V.D.1.a through V.D.1.c. To be considered an emergency ICE, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in Conditions V.D.1.a through V.D.1.c below, is prohibited. If the

emergency ICE is not operated according to these requirements, it will not be considered an emergency ICE and must meet all requirements for non-emergency ICEs.

[40 CFR 60.4211(f)]

a. There is no time limit on the use of the emergency ICE in emergency situations.

[40 CFR 60.4211(f)(1)]

b. The Permittee may operate the emergency ICE for any combination of the purposes specified in Conditions V.D.1.b(1) through V.D.1.b(3) below for a maximum of 100 hours per calendar year. Any non-emergency situation as allowed by Condition V.D.1.c below counts as part of the 100 hours per calendar year allowed by this Condition.

[40 CFR 60.4211(f)(2)]

(1) The Permittee may operate the emergency ICE for the purpose of maintenance checks and readiness testing, 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 and/or the Administrator 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 the federal, state, or local standards require maintenance and testing beyond 100 hours per year. These records shall be made available to ADEQ upon request.

[40 CFR 60.4211(f)(2)(i)]

(2) The Permittee may operate the emergency ICE for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies, or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

[40 CFR 60.4211 (f)(2)(ii)]

(3) The Permittee may operate the emergency ICE for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

[40 CFR 60.4211(f)(2)(iii)]

c. The Permittee may operate the emergency 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 and emergency demand response provided in Condition V.D.1.b above. Except as provided in Condition V.D.1.c(1) 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 60.4211(f)(3)]

(1) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
[40 CFR 60.4211(f)(3)(i)]

(a) The emergency ICE is dispatched by the local balancing authority or local transmission and distribution system operator.
[40 CFR 60.4211(f)(3)(i)(A)]

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

(c) The dispatch follows reliability emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
[40 CFR 60.4211(f)(3)(i)(C)]

(d) The power is provided only to the facility itself or to support the local transmission and distribution system.
[40 CFR 60.4211(f)(3)(i)(D)]

(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 emergency ICE. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the Permittee.
[40 CFR 60.4211(f)(3)(i)(E)]

2. The Permittee shall install a non-resettable hour meter prior to startup of the engine.

[40 CFR 60.4209(a) and A.A.C. R18-2-331.A.3.c]
[Material permit conditions are indicated by underlines and italics]

3. Any operation of the emergency ICE other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, is prohibited.

[40 CFR 60.4211(f) and A.A.C. R18-2-331.A.3.a]
[Material permit conditions are indicated by underlines and italics]

E. Compliance Requirements

1. The Permittee must purchase an emergency ICE certified to the emission standards in Condition V.C.1, as applicable, for the same model year and maximum engine power. The emergency ICE must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in Condition V.E.4.

[40 CFR 60.4211(c)]
2. The Permittee must comply with the emission standards for new non-road CI engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency ICE with a displacement of less than 30 liters per cylinder.

[40 CFR 60.4205(b)]
3. The Permittee shall meet the following compliance requirements except as permitted in Condition V.E.2 below:
 - a. Operate and maintain the emergency ICE according to the manufacturer's emission-related written instructions;

[40 CFR 60.4211(a)(1)]
 - b. Change only those emission-related settings that are permitted by the manufacturer; and

[40 CFR 60.4211(a)(2)]
 - c. Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to the facility.

[40 CFR 60.4211(a)(3)]
4. If the Permittee does not install, configure, operate, and maintain the emergency ICE according to the manufacturer's emission-related written instructions, or changes emission-related settings in a way that is not permitted by the manufacturer, the Permittee shall demonstrate compliance as follows:
 - a. Keep a maintenance plan and records of conducted maintenance to demonstrate compliance and shall, to the extent practicable, maintain and operate the emergency ICE in a manner consistent with good air pollution control practice for minimizing emissions.

[40 CFR 60.4211(g)(2)]
 - b. Conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after the emergency ICE is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the facility changes emission-related settings in a way that is not permitted by the manufacturer.

[40 CFR 60.4211(g)(2)]
 - c. The Permittee shall conduct the performance test, as required per Condition V.E.2.a above, in accordance with the following:

- (1) The performance test shall be conducted according to the in-use testing procedures in 40 CFR part 1039, Subpart F, for engines with a displacement of less than 10 liters per cylinder, and according to 40 CFR part 1042, Subpart F, for engines with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.
[40 CFR 60.4212(a)]
 - (2) Exhaust emissions from any engine shall not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d).
[40 CFR 60.4212(b)]
5. The Permittee shall comply with the requirements of NESHAP Subpart ZZZZ by meeting the requirements of NSPS Subpart IIII in this Section.
[40 CFR 63.6590]

F. Recordkeeping and Reporting Requirements

1. The Permittee must keep records of the operation of the emergency ICE in emergency and non-emergency service that are recorded through the non-resettable hour meter. The Permittee must record the time of operation of the engine and the reason the engine was in operation during that time.
[40 CFR 60.4214(b)]
2. The Permittee must submit an annual report.
[40 CFR 60.4214(d)]
 - a. The report must contain the following information:
[40 CFR 60.4214(d)(1)]
 - (1) Company name and address where the emergency ICE is located.
[40 CFR 60.4214(d)(1)(i)]
 - (2) Date of the report and beginning and ending dates of the reporting period.
[40 CFR 60.4214(d)(1)(ii)]
 - (3) Emergency ICE site rating and model year.
[40 CFR 60.4214(d)(1)(iii)]
 - (4) Latitude and longitude of the emergency ICE in decimal degrees reported to the fifth decimal place.
[40 CFR 60.4214(d)(1)(iv)]
 - (5) Hours operated for the purposes specified in Conditions D.1.b(2) and D.1.b(3) above, including the date, start time, and end time for emergency ICE operation for the purposes specified in Conditions D.1.b(2) and D.1.b(3) above.
[40 CFR 60.4214(d)(1)(v)]

- (6) Number of hours the emergency ICE is contractually obligated to be available for the purposes specified in Conditions D.1.b(2) and D.1.b(3) above.
[40 CFR 60.4214(d)(1)(vi)]
- (7) Hours spent for operation for the purposes specified in Condition V.D.1.c(1) above, including the date, start time, and end time for emergency ICE operation for the purposes specified in Condition V.D.1.c(1) above. The report must also identify the entity that dispatched the emergency ICE and the situation that necessitated the dispatch of the emergency ICE.
[40 CFR 60.4214(d)(1)(vii)]
3. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.
[40 CFR 60.4214(d)(2)]
4. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in 40 CFR 60.4.
[40 CFR 60.4214(d)(3)]
5. Permit Shield
- Compliance with the conditions of this Part shall be deemed compliance with 40 CFR 60.4205(b), 60.4206, 60.4207(b), 60.4209(a), 60.4211(a), 60.4211(c), 60.4211(f), 60.4211(g)(2), 60.4212(a), 60.4212(b), 60.4214(b), 60.4214(d)(1), 60.4214(d)(2), 60.4214(d)(3) and 1090.305.
[A.A.C. R18-2-325]

V. MOBILE SOURCE REQUIREMENTS

A. Applicability

This Section is applicable to mobile sources which either move while emitting air contaminants or are frequently moved during the course of their utilization but are not classified as motor vehicles, agricultural vehicles, or agricultural equipment used in normal farm operations. Mobile sources shall not include portable sources as defined in A.A.C. R18-2-101.108.

B. Particulate Matter and Opacity

1. Emission Limitations and Standards
- a. Off-Road Machinery

The Permittee shall not cause, allow or permit to be emitted into the atmosphere from any off-road machinery, smoke for any period greater than 10 consecutive seconds, the opacity of which exceeds 40%. Visible emissions when starting cold equipment shall be exempt from this requirement for the first 10 minutes. Off-road machinery shall include trucks, graders, scrapers, rollers, and other construction and mining machinery not normally driven on a completed public roadway.

[A.A.C. R18-2-802.A and -802.B]

b. Roadway and Site Cleaning Machinery

(1) The Permittee shall not cause, allow or permit to be emitted into the atmosphere from any roadway and site cleaning machinery smoke or dust for any period greater than 10 consecutive seconds, the opacity of which exceeds 40%. Visible emissions when starting cold equipment shall be exempt from this requirement for the first 10 minutes.

[A.A.C. R18-2-804.A]

(2) The Permittee shall take reasonable precautions, such as the use of dust suppressants, before the cleaning of a site, roadway, or alley. Earth or other material shall be removed from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water or by other means.

[A.A.C. R18-2-804.B]

(3) Unless otherwise specified, no mobile source shall emit smoke or dust the opacity of which exceeds 40%.

[A.A.C. R18-2-801.B]

2. Recordkeeping Requirement

The Permittee shall keep a record of all emissions related maintenance activities performed on mobile sources stationed at the facility as per manufacturer's specifications.

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

3. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-801, -802, and -804.

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

VI. 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 Limitation and Standards

- a. Opacity of emissions from any fugitive dust non-point source shall not be greater than 40%.

[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;

[A.A.C. R18-2-605.B]

- (5) Take reasonable precautions, such as the use of spray bars, wetting agents, dust suppressants, covering the load, and hoods when crushing, handling, or conveying material likely to give rise to airborne dust;

[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;

[A.A.C. R18-2-607.A]

VII. OTHER PERIODIC ACTIVITIES

- (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 Control Requirement

Haul Roads and Storage Piles

Water, 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 and -331.A.3.d]

[Material permit conditions are indicated by underlines 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 VI.B.1.b(1) through (9) above were performed and the control measures that were adopted.

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

- b. A certified EPA Reference Method 9 observer shall conduct a monthly survey of visible emissions from fugitive dust sources in accordance with Condition I.B of this Attachment.

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

4. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-604, -605, -606, 607, -608 and -614.

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

VII. OTHER PERIODIC ACTIVITIES

A. Abrasive Blasting

1. Particulate Matter and Opacity

a. Emission Standard

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:

[A.A.C. R18-2-726]

- (1) Wet blasting;
- (2) Effective enclosures with necessary dust collecting equipment; or
- (3) Any other method approved by the Director.

b. Opacity

The Permittee shall not cause, allow or permit visible emissions from sandblasting or other abrasive blasting operations in excess of 20% opacity.

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

2. Monitoring and Recordkeeping Requirements

Each time an abrasive blasting project is conducted, the Permittee shall make a record of the following:

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

- a. The date the project was conducted;
- b. The duration of the project; and
- c. Type of control measures employed.

3. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-702.B.3 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]

VII. OTHER PERIODIC ACTIVITIES

- (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 VII.B.1.a(2), 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 Conditions VII.B.1.a(3)(a) through VII.B.1.a(3)(c) or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent: [A.A.C. R18-2-727.C]
- (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.
- (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 VII.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.A.C. R18-2-306.A.3.c]
- (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 VII.B.1.b(1).
[A.A.C. R18-2-306.A.3.c]
 - c. Permit Shield

Compliance with the conditions of this Part deemed compliance with A.A.C.R18-2-727.
[A.A.C.R18-2-325]
2. Opacity
- a. Emission Limitation

The Permittee shall not cause, allow or permit visible emissions from painting operations in excess of 20% opacity.
[A.A.C. R18-2-702.B.3]
 - b. Permit Shield

Compliance with the condition of this Part shall be deemed compliance with A.A.C. R18-2-702.B.3.
[A.A.C. R18-2-325]
- C. Demolition/Renovation - Hazardous Air Pollutants
- 1. Emission Limitations and Standards

The Permittee shall comply with all of the requirements of 40 CFR 61 Subpart M (National Emission 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 conditions of this Part shall be deemed compliance with A.A.C. R18-2-1101.A.12.
[A.A.C. R18-2-325]

ATTACHMENT “C”: EQUIPMENT LIST

EQUIPMENT TYPE	MAXIMUM CAPACITY	MAKE	MODEL	SERIAL NUMBER	INSTALLATION / MFG. DATE	EQUIPMENT ID NUMBER	A.A.C. / NSPS / NESHAP
Boiler	10.46 MMBtu/hr	Cleaver Brooks	CB700-250	L89826	8/1991	TBD	40 CFR 60.48c(g)(1) and (i)
Solvent Extraction Circuit	24,588 ft ²	N/A	N/A	N/A	1976/1989*	N/A	A.A.C. R18-2-730
Electrowinning Circuit	105 cells; 3,161 ft ²	Holmes & Narver	N/A	N/A	1976/1989*	N/A	A.A.C. R18-2-730
Emergency ICE (Subject to NSPS)	375 HP	Caterpillar	300	CAT000C0TN GP00137	2014	TBD	40 CFR 60 Subpart III

*The original SX/EW facility was installed in 1976, with two trains of solvent extraction and a 60-cell tank house. In 1989, an additional 45 cells were added and the SX trains were modified to handle the additional flow.