

PERMIT #66619
PLACE ID #7466

PERMITTEE: Freeport-McMoRan Miami Inc.
FACILITY: Miami Mine
PERMIT TYPE: Class II Air Quality Permit
DATE ISSUED:
EXPIRY DATE:

SUMMARY

This Class II operating permit is issued to Freeport-McMoRan Miami Inc., the Permittee, for the continued operation of the Miami Mine, located off of Hwy 60 in Claypool Arizona. This permit is a renewal of Permit #56130.

The Miami Mine's maximum capacity to emit with any elective limits for regulated NSR pollutants is greater than the significant levels identified in A.A.C. R18-2-101.131. Therefore, a Class II permit is required for this facility in accordance with A.A.C. R18-2-302.B.2.a.

This permit is issued in accordance with Arizona Revised Statutes (ARS) 49-426. It contains requirements from Title 18, Chapter 2 of the Arizona Administrative Code (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.

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ATTACHMENT "A": GENERAL PROVISIONS

I. PERMIT EXPIRATION AND RENEWAL

[ARS § 49-426.F, A.A.C. R18-2-304.D.2, and -306.A.1]

- A. This permit is valid for a period of five (5) years from the date of issuance.
- 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.

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; or

[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 reopenings 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
[A.A.C. R18-2-315.A.1]
 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.2]
- 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 ARS § 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 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 certification shall be based on the methods or means designated in Condition VII.B.2 above. The certifications shall identify each deviation and take it into account in the compliance certification;

[A.A.C. R18-2-309.c.iii]

4. All instances of deviations from permit requirements reported pursuant to Condition XII.B of this Attachment; and
5. Other facts the Director may require determining the compliance status of the source.

[A.A.C. R18-2-309.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. R18-2-304.I and -309.A.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 Condition 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

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.

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

- (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.2]

- b. The excess emission report shall contain the following information:

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

- (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) Date, 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.

[A.A.C. R18-2-310.01.B.8]

2. In the case of continuous or recurring excess emissions, the notification requirements of this Condition 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:

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

1. Notice that complies with A.A.C. R18-2-310.01.A is prompt for deviations that constitute excess emissions;

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

2. Except as provided in Condition XII.B.1 above, notice that complies with Condition I.B.2 of Attachment “B,” is prompt for all other types of deviations. Any such deviations that occur during the annual reporting period shall be clearly identified in the report required by Condition I.B.2 of Attachment “B.”

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

C. Emergency Provision

1. An “emergency” means any situation arising from sudden and reasonable unforeseeable events beyond the control of the Permittee, 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 such 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. At the time of the emergency, the permitted facility was being properly operated;

[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 standards or limitations:

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

 - a. Promulgated pursuant to Conditions 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.b 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 3 above, the Permittee shall demonstrate, through submission of the data and information required by Condition XII.D and A.A.C. R18-2-310.01, 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) 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 such 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

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

The Permittee shall submit the following reports:

- A.** Compliance certifications in accordance with Condition VII of this Attachment.
- B.** Excess emission; permit deviation, and emergency reports in accordance with Condition XII of this Attachment.
- 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. R18-2-306.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.

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

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 C below, a change at a Class II source shall not be subject to revision, notice, or logging requirements under this Condition.

[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 Permittee 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;
[A.A.C. R18-2-317.02.B.1]
2. Changing process equipment, operating procedures, or making any other physical change if the permit requires the change to be logged;
[A.A.C. R18-2-317.02.B.2]
3. Engaging in any new insignificant activity listed in A.A.C. R18-2-101.68 but not listed in the permit;
[A.A.C. R18-2-317.02.B.3]
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
[A.A.C. R18-2-317.02.B.4]
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.
[A.A.C. R18-2-317.02.B.5]

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;
[A.A.C. R18-2-317.02.C.1]
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;
[A.A.C. R18-2-317.02.C.2]
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;

[A.A.C. R18-2-317.02.C.3]

4. A change that would trigger an applicable requirement that already exists in the permit: 30 days unless otherwise required by the applicable requirement;
[A.A.C. R18-2-317.02.C.4]
 5. A change that amounts to reconstruction of the source or an affected facility: 7 days. For the purposes of this Condition, 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
[A.A.C. R18-2-317.02.C.5]
 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.
[A.A.C. R18-2-317.02.C.6]
- D.** For each change under Condition XVII.C above, 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;
[A.A.C. R18-2-317.02.D.1]
 2. A description of the change;
[A.A.C. R18-2-317.02.D.2]
 3. Any change in emissions of regulated air pollutants; and
[A.A.C. R18-2-317.02.D.3]
 4. Any permit term or condition that is no longer applicable as a result of the change.
[A.A.C. R18-2-317.02.D.4]
- E.** A source may implement any change in Condition XVII.C above without the required notice by applying for a minor permit revision under A.A.C. R18-2-319 and complying with A.A.C. R18-2-319.D(2) and G.
[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 Condition, other than implementation of an alternate operating scenario under Condition XVII.B.1 above.
[A.A.C. R18-2-317.02.F]
- G.** Notwithstanding any other part of this Condition, 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 Condition over the term of the permit, constitutes a change under Condition 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 above, the source shall comply with Condition XVII.C above. If a source change is described under both Condition XVII.C above 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 above 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 above 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.A.C. R18-2-312]

- A.** The Permittee shall conduct performance tests as specified in the permit and at such other times as may be required by the Director.
- 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 calendar days prior to performing a test, the Permittee shall submit a test plan to the Director in accordance with A.A.C. R18-2-312.B and the Arizona Testing Manual. This test plan must include the following:

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

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;
[A.A.C. R18-2-312.E.1]
2. Safe sampling platform(s);
[A.A.C. R18-2-312.E.2]
3. Safe access to sampling platform(s); and
[A.A.C. R18-2-312.E.3]
4. Utilities for sampling and testing equipment.
[A.A.C. R18-2-312.E.4]

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. R18-2-312.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 30 days 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]

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 subsections XVIII.H.1, 2, and 3 of this Condition, the Permittee remains subject to the requirements of Condition XVIII.

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

5. For purposes of this Condition, 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 any minor revisions pursuant to Condition XVI.C of this Attachment and any facility changes without a permit revision pursuant to Condition XVII of this Attachment.

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

XXII. PROTECTION OF STRATOSPHERIC OZONE

[40 CFR Part 82]

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

XXIII. APPLICABILITY OF NSPS/NESHAP GENERAL PROVISIONS

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

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 respectively.

ATTACHMENT "B": SPECIFIC CONDITIONS

I. FACILITY-WIDE REQUIREMENTS

A. Operating Limitations

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.3.c]

2. All equipment except "Miscellaneous Heaters" and "Storage Tanks" identified in Attachment "C" of this permit shall be operated and maintained in accordance with vendor-supplied operations and maintenance instructions or an operation and maintenance (O&M) plan prepared by the Permittee that provides adequate information to properly operate and maintain the equipment.

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

B. Monitoring, Recordkeeping and Reporting Requirements

1. The Permittee shall maintain, on-site, records of the vendor-supplied operations and maintenance instructions or the Permittee's O&M plan required by Condition I.A.2 above. These records shall be made available to ADEQ upon request.

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

2. The Permittee shall submit annual reports of all monitoring activities required in Attachment "B" along with the compliance certifications required by Condition VII of Attachment "A."

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

II. BOILERS AND OTHER FUEL BURNING EQUIPMENT

A. Fuel Limitations

This Condition II.A applies to Tankhouse Boilers 1, 2, and 3, the Propane Water Heater, and other miscellaneous (space and water) heaters.

1. The Permittee shall fire only natural gas in Tankhouse Boilers 1, 2, 3, and miscellaneous (space and water) heaters; and
2. The Permittee shall use only propane in the Propane Water Heater.

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

B. Affected Facilities Subject to Standards of Performance for Fossil-fuel Fired Industrial and Commercial Equipment under A.A.C. R18-2-724

This Condition II.B applies to affected facilities identified in Attachment "C" (Equipment List) as subject to A.A.C. R18-2-724.

1. Emissions Limitations and Standards

- a. The Permittee shall not cause, allow or permit the emission of particulate matter, caused by combustion of fuel from the affected sources into the atmosphere in excess of the amounts calculated by the following equation:

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

Where

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

Q = the heat input in million Btu per hour
[A.A.C. R18-2-724.C.1]

b. For purposes of this Condition, 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 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]

c. The Permittee shall not cause, allow or permit the opacity of any plume or effluent from any boiler/ heater to exceed 15%.
[A.A.C. R18-2-724.J]

2. Monitoring, Recordkeeping, and Reporting Requirements

a. The Permittee shall keep records of fuel supplier certifications or letters from fuel suppliers, containing information regarding the name of the fuel supplier and lower heating value (or range of heating value) of the fuel. These records shall be made available to ADEQ upon request.
[A.A.C. R18-2-306.A.3.c]

b. The Permittee shall report all 6-minute periods during which the visible emissions exceed 15 percent opacity, as required under Condition XII of Attachment "A."
[A.A.C. R18-2-724.J]

3. Permit Shield

Compliance with the requirements of Condition II.B shall be deemed compliance with A.A.C. R18-2-724.B, C.1, and J.

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

C. Affected Facilities Subject to New Source Performance Standards for Small Industrial-Commercial-Institutional Steam Generating Units under 40 CFR Part 60, Subpart Dc

This Condition II.C applies to affected facilities identified in Attachment "C" (Equipment List) as subject to NSPS Subpart Dc.

1. General Provisions

The following requirements apply to the operation, maintenance, recordkeeping and reporting in accordance with 40 CFR Part 60, Subpart A – General Provisions.

a. The Permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility;

any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

[40 CFR 60.7(b)]

- b. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate Tankhouse Boiler No.3 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)]

- c. For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any standard in 40 CFR Part 60, nothing shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

[40 CFR 60.11(g)]

- d. The Permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission, which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[40 CFR 60.12]

- e. The Permittee shall comply with applicable "General Notification and Reporting Requirements" listed in 40 CFR 60.19.

[40 CFR 60.19]

2. Monitoring, Recordkeeping and Reporting Requirements

- a. The Permittee shall maintain records of the amounts of fuel combusted during each calendar month.

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

- b. All records of monthly fuel combusted shall be maintained by the Permittee for a period of two years following the date of such record.

[40 CFR 60.48c(i)]

3. Permit Shield

Compliance with Condition II.C shall be deemed compliance with the 40 CFR §60.48c(g) and (i).

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

D. Affected Sources Subject to National Emission Standards for Hazardous Air Pollutants

(NESHAP) for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters under 40 CFR Part 63, Subpart DDDDD

This Condition II.D applies to affected sources identified in Attachment “C” (Equipment List) as subject to NESHAP Subpart DDDDD.

1. Operation and Maintenance

At all times, the Permittee shall 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 Administrator that 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 63.7500(a)(3)]

2. Boiler Tune-ups

a. Periodic Tune-up

The Permittee shall conduct annual tune-ups according to the tune-up procedure described in Conditions II.D.2.b(1)(a) through (f) below. The annual tune-up shall be conducted within 13 months of the previous tune-up.

[40 CFR 63.7500(e), 7515(d), and Table 3, Item 3]

b. Tune-up Procedure

(1) The Permittee shall conduct the annual tune-ups required in Conditions II.D.2.a above according to the following steps:

[40 CFR 63.7540(a)(10)]

(a) Inspect the burner, and clean or replace any components of the burner as necessary. The Permittee may delay the burner inspection until the next scheduled unit shutdown;

[40 CFR 63.7540(a)(10)(i)]

(b) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;

[40 CFR 63.7540(a)(10)(ii)]

(c) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. The Permittee may delay the burner inspection until the next scheduled unit shutdown;

[40 CFR 63.7540(a)(10)(iii)]

(d) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's

specifications, if available, and with any NO_x requirement to which the unit is subject;

[40 CFR 63.7540(a)(10)(iv)]

- (e) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and

[40 CFR 63.7540(a)(10)(v)]

- (f) Maintain on-site and submit, if requested by the Administrator, an annual report containing the information below:

[40 CFR 63.7540(a)(10)(vi)]

- (i) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;

[40 CFR 63.7540(a)(10)(vi)(A)]

- (ii) A description of any corrective actions taken as a part of the tune-up; and

[40 CFR 63.7540(a)(10)(vi)(B)]

- (iii) The type and amount of fuel used over the 12 months prior to the tune-up, only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

[40 CFR 63.7540(a)(10)(vi)(C)]

- (2) If any affected boiler or process heater has a continuous oxygen trim system that maintains an optimum air to fuel ratio, the Permittee must conduct a tune-up of the boiler or process heater every 5 years as specified in Conditions II.D.2.b(1)(a) through (f) above to demonstrate continuous compliance. The Permittee may delay the burner inspection specified in Condition II.D.2.b(1) above until the next scheduled or unscheduled unit shutdown, but shall inspect each burner at least once every 72 months.

[40 CFR 63.7540(a)(12)]

- (3) If the affected boiler is not operating on the required date for a tune-up, the Permittee shall conduct a tune-up within 30 calendar days of startup.

[40 CFR 63.7540(a)(13)]

c. Notification and Reporting Requirements

- (1) The Permittee shall submit to the Administrator all of the

applicable notifications in 40 CFR §§ 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) by the dates specified.

[40 CFR 63.7545(a)]

- (2) The Permittee shall submit a Notification of Compliance Status Report containing all the applicable information specified in Conditions II.D.2.c(2)(a) through (d) below:

[40 CFR 63.7545(e)]

(a) A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with 40 CFR 63, Subpart DDDDD, description of the fuel(s) burned, and justification for the selection of fuel(s) burned during the compliance demonstration. [40 CFR 63.7545(e)(1)]

(b) A signed certification that the Permittee has met all applicable work practice standards.

[40 CFR 63.7545(e)(6)]

(c) In the event of a deviation, the Permittee shall submit a description of the deviation, the duration of the deviation, and the corrective action taken in the Notification of Compliance Status report.

[40 CFR 63.7545(e)(7)]

(d) In addition to the information required by 40 CFR 63.9(h)(2), the Notification of Compliance Status report must include the following certification(s) of compliance, as applicable, and signed by a responsible official:

(i) “This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR part 63 subpart DDDDD at this site according to the procedures in 40 CFR 63.7540(a)(10)(i) through (vi).”

(ii) “This facility has had an energy assessment performed according to 40 CFR 63.7530(e).”

[40 CFR 63.7545(e)(8)(i) and (ii)]

- (3) The Permittee shall submit a Compliance report semiannually, annually, biennially, or every 5 years according to the requirements in 40 CFR 63.7550(b).

[40 CFR 63.7550(b) and Item 1, Table 9]

(a) Each compliance report shall cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Annual, biennial, and 5-year compliance reports must cover the applicable 1, 2, or 5 year periods from January 1 to December 31.

[40 CFR 63.7550(b)(3)]

- (b) Each compliance report must be postmarked or submitted no later than July 31st or January 31st, whichever date is the first date following the end of the semiannual reporting period. Annual, biennial, and 5 year compliance reports must be postmarked or submitted no later than January 31st.

[40 CFR 63.7550(b)(4)]
- (4) The Compliance report shall contain the following information:

[40 CFR 63.7550(c)(1)]

 - (a) Company and Facility name and address.

[40 CFR 63.7550(c)(5)(i)]
 - (b) Process unit information, emissions limitations, and operating parameter limitations.

[40 CFR 63.7550(c)(5)(ii)]
 - (c) Date of report and beginning and ending dates of the reporting period.

[40 CFR 63.7550(c)(5)(iii)]
 - (d) The date of the most recent tune-up for each unit subject to only the requirement to conduct an annual, biennial, or 5-year tune-up according to Condition II.D.2.b(1) above. The report shall include the date of the most recent burner inspection if it was not done annually or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.

[40 CFR 63.7550(c)(5)(xiv)]
 - (e) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

[40 CFR 63.7550(c)(5)(xvii)]
- (5) The Permittee shall submit all reports electronically using CEDRI that is accessed through the 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 Permittee shall submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. At the discretion of the Administrator, the Permittee shall also submit these reports, to the Administrator in the format specified by the Administrator.

[40 CFR 63.7550(h)(3)]

d. Recordkeeping Requirements

- (1) The Permittee shall maintain the following records:

[40 CFR 63.7555(a)]

 - (a) A copy of each notification and report submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or

Notification of Compliance Status or semiannual Compliance report, according to the requirements in 40 C.F.R. 63.10(b)(2)(xiv).

[40 CFR 63.7555(a)(1)]

(b) Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).

[40 CFR 63.7555(a)(2)]

(2) The Permittee shall maintain the records in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1).

[40 CFR 63.7560(a)]

(3) The Permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record in accordance with 40 CFR 63.10(b)(1).

[40 CFR 63.7560(b)]

(4) The Permittee shall keep each record on site, or they must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). The Permittee can keep the records off site for the remaining 3 years.

[40 CFR 63.7560(c)]

e. Permit Shield

Compliance with the Condition II.D shall be deemed compliance with 40 CFR 63.7500(a), (a)(3), (e), 7515(d), 7540(a)(10), (a)(13), 7545(a), (e)(1), (6), (7), 7550(b), (b)(3), (4), (c)(1), (c)(5)(i) to (iii), (xiv), and (xvii), and (h)(3), 7555(a)(1) and (a)(2), and 7560.

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

III. SOLVENT EXTRACTION/ELECTROWINNING PROCESS (SX/EW), MISC. STORAGE TANKS AND OTHER UNCLASSIFIED OPERATIONS

A. Applicability

This Condition applies to the following unclassified sources:

1. SX/EW plant
2. Miscellaneous storage tanks/vessels listed in the Equipment List, Attachment "C."
3. Degreasing Operations

B. Particulate Matter and Opacity

1. Emission Limitation and Standards

- a. The Permittee shall not cause or permit the emissions of particulate matter

discharged into the atmosphere in any one hour from the equipment associated with the SX/EW plant in total quantities in excess of the amounts calculated by one of the following equations:

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

- (1) 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:

$$E = 4.1P^{0.67}$$

where:

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

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

- (2) 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 in Condition III.B.1.a(1) above.

- b. For purposes of this Condition, 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]

- c. Opacity

- (1) The opacity of any point source emissions from the equipment associated with the SX/EW plant shall not be greater than 20 percent.

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

- (2) The opacity of any non-point source emissions from the equipment associated with the SX/EW plant shall not be greater than 40 percent.

[A.A.C. R18-2-614]

2. Monitoring, Record keeping and Reporting Requirements

A certified EPA Reference Method 9 observer shall conduct a quarterly survey of visible emissions emanating from the SX/EW plant. If the opacity of the emissions observed appears to exceed the standard, the observer shall conduct a certified EPA Reference Method 9 observation. The Permittee shall keep records of the initial survey and any EPA Reference Method 9 observations performed. These records shall include the emission point observed, location of observer, name of observer, date and time of observation, and the results of the observation. If the observation results in an exceedance of the opacity limit contained in Condition.III.B.1.c

above, the Permittee shall take corrective action and log all such actions. Such exceedance shall be reported as excess emissions in accordance with Condition XII.A.1 of Attachment "A".

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

3. Permit Shield

Compliance with the requirements of Condition III.B above shall be deemed compliance with A.A.C. R18-2-614, -702.B.3, -730.A, and B.

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

C. Volatile Organic Compounds (VOCs)

1. Emission Limitation and Standards

a. The Permittee shall not cause or permit the emission of gaseous or odorous materials from equipment and operations identified in Condition III.A above 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, and other chemicals utilized shall be processed, stored, used, and transported in such a manner and by 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 owner or operator thereof 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]

2. Air Pollution Control Requirements

a. *The Permittee shall install, maintain and use covers on the mixer settler tanks to control emissions from the Solution Extraction Plant.*

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

[Material permit conditions are indicated by underline and italics]

b. *The Permittee shall use one or more of the following methods to control emissions from the Electrowinning Tankhouse:*

(1) *Foam*

(2) *Blankets*

(3) *Surfactants*

- (4) Thermal retention balls
- (5) Other effective means of controlling sulfuric acid emissions approved by the Director.

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

[Material permit conditions are indicated by underline and italics]

3. Monitoring, Reporting and Recordkeeping Requirements

The Permittee shall maintain a record of all control measures used to limit emissions from the SX/EW process.

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

4. Permit Shield

Compliance with the requirements of Condition III.C above shall be deemed compliance with A.A.C. R18-2-730.D, F, and G.

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

IV. INTERNAL COMBUSTION ENGINES- EMERGENCY

A. Fuel Limitations

- 1. The Permittee shall fire only diesel in the 750-kW Caterpillar emergency generators (Diesel-fired) – 2 Nos.
- 2. The Permittee shall fire only natural gas in the 765-kW Caterpillar emergency generator (Gas fired).

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

B. Affected Facilities Subject to Standards of Performance for Existing Stationary Rotating Machinery under A.A.C. R18-2-719

This Condition IV.B applies to affected facilities that are emergency engines identified in Attachment “C” (Equipment List) as subject to A.A.C. R18-2-719.

1. Particulate Matter and Opacity

a. Emissions Limitations and Standards

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

[A.A.C. R18-2-719.C.1]

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

Where

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

Q = the heat input in million Btu per hour

- (2) 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]

b. Monitoring, Reporting, and Recordkeeping Requirements

- (1) A certified EPA Reference Method 9 observer shall conduct a monthly survey of visible emissions emanating from the stack of the diesel-fired generators, when in operation. If the opacity of the emissions observed appears to exceed the standard, the observer shall, if practicable, conduct a certified EPA Reference Method 9 observation. The Permittee shall keep records of the initial survey and any EPA Reference Method 9 observations performed. These records shall include the emission point observed, name of observer, date and time of observation, and the results of the observation. If the observation results in an exceedance of the opacity limit contained in Condition.IV.B.1.a(2) above, the Permittee shall take corrective action and log all such actions. Such exceedance shall be reported as excess emissions in accordance with Condition XII.A.1 of Attachment "A".
[A.A.C. R18-2-306.A.3.c]

- (2) The Permittee shall keep records of fuel supplier certifications that contain information regarding the name of fuel supplier and heating value of the fuel. These records shall be made available to ADEQ upon request.
[A.A.C. R18-2-306.A.3.c and -719.I]

c. Permit Shield

Compliance with the requirements of Condition IV.B above shall be deemed compliance with A.A.C. R18-2-719.B, C.1, E, and I.

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

a. Emission Limitations and Standards

- (1) The Permittee shall not emit or cause to emit more than 1.0 pound of sulfur dioxide per million Btu heat input.
[A.A.C. R18-2-719.F]
- (2) The Permittee shall not burn high sulfur diesel fuel (sulfur content greater than 0.9 % by weight) in the diesel-fired engines.
[A.A.C. R18-2-719.H]

b. Monitoring, Recordkeeping, and Reporting Requirements

- (1) The Permittee shall keep records of fuel supplier certifications or other documentation to demonstrate compliance with the sulfur content limit specified in Condition IV.B.2.a(2) above. The

certification shall contain the sulfur content of the fuel. These records shall be made available to ADEQ upon request.

[A.A.C. R18-2-306.A.3.c and -719.I]

- (2) The Permittee shall report to the Director any daily period during which the sulfur content of the fuel being fired in the engine exceeds 0.8%.

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

c. Permit Shield

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

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

C. Affected Facilities Subject to New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines under 40 CFR Part 60, Subpart III

This Condition IV.C applies to affected facilities that are emergency engines identified in Attachment "C" (Equipment List) as subject to NSPS Subpart III.

1. Operating Requirements

- a. The Permittee shall limit the use of the generators to only emergency situations and required testing and maintenance such as to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility is interrupted

[40 CFR 60.4219]

- b. The Permittee shall operate and maintain the generators over the entire life of the engine according to the manufacturer's emission-related written instructions. A copy of the instructions shall be kept onsite and made available to ADEQ upon request.

[40 CFR 60.4206 and 4211(a)(1)]

- c. The Permittee shall only change those emission-related settings that are permitted by the manufacturer.

[40 CFR 60.4211(a)(2)]

- d. The Permittee shall meet the applicable requirements of 40 CFR Part 89, 94 and/or 1068.

[40 CFR 60.4211(a)(3)]

- e. *The Permittee shall install a non-resettable hour meter prior to startup of the engines.*

[40 CFR 60.4209(a), A.A.C. R18-2-306.A.3.c, and -331.A.3.c]
[Material Permit Conditions are indicated by underline and italics]

- f. The Permittee shall operate the emergency stationary ICE according to the requirements in Conditions IV.C.1.f(1) through (3) below. In order for the engine to be considered an emergency stationary ICE, any operation other than emergency operation, maintenance response, and operation in non-emergency situations for 50 hours per year, as described in Conditions IV.C.1.f(1) through (3) below, is prohibited. If the emergency stationary

ICE is not operated in accordance with the requirements in Conditions IV.C.1.f(1) through (3) below, the engine will not be considered an emergency engine and must meet all requirements for non-emergency engines.

[40 CFR 60.4211(f)]

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

[40 CFR 60.4211(f)(1)]

- (2) The Permittee may operate the emergency stationary ICE for any combination of the purposes specified in Conditions IV.C.1.f(2)(a) and (b) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by Condition IV.C.1.f(3) below counts as part of the 100 hours per calendar year.

[40 CFR 60.4211(f)(2)]

- (a) Emergency stationary ICE may be operated for 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.

- (b) The Permittee may petition the Administrator or 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 the 100 hours per year.

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

- (3) The Permittee may operate the emergency stationary 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 IV.C.1.f(2) above. Except as provided in Condition IV.C.1.f(4) below, 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 of 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 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.

2. Fuel Requirements

The Permittee shall use diesel fuel that meets the following requirements as specified in 40 CFR 80.510(b):

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

[40 CFR 60.4207(b) and 80.510(b)]

3. Emission Limitations and Standards

The Permittee shall comply with the emission standards for new non-road engines specified in 40 CFR 60.4202.

[40 CFR 60.4205(b)]

4. Compliance Requirements

- a. The Permittee shall comply by purchasing engines certified to the emission standards in 40 CFR 60.4205(b). Each engine must be installed and configured according to the manufacturer's specifications.

[40 CFR 60.4211(c)]

- b. If the Permittee does not install, configure, operate, and maintain the diesel-fired generators according to the manufacturer's emission-related written instructions, or if the Permittee changes the emission-related setting in a way that is not permitted by the manufacturer, the Permittee shall demonstrate compliance by keeping a maintenance plan and records of maintenance conducted and shall, to the extent practicable, maintain and operate each 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.

[40 CFR 60.4211(g) and (g)(1)]

5. Recordkeeping Requirements

[40 CFR 60.4214(b)]

Starting with the model years in Table 5 of 40 CFR 60 Subpart IIII, the Permittee operating an emergency ICE that does not meet the standards applicable to non-emergency engines in the applicable model year, shall keep records of emergency and non-emergency operation as 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.

6. Permit Shield

Compliance with the requirements of Condition IV.C above shall be deemed compliance with 40 CFR 60.4205(b), 4207(b), 4208(a), 4211(a)(2), (a)(3), (c), (f), and (g), 4214(b), and 4219.

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

D. National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE) under 40 CFR Part 63, Subpart ZZZZ

This Condition IV.D applies to affected sources that are emergency engines identified in Attachment "C" (Equipment List) as subject to NESHAP Subpart ZZZZ.

1. Existing stationary RICE with a site rating of more than 500 brake HP Engines do not have to meet the requirements of 40 CFR Part 63, Subpart A or Subpart ZZZZ, including initial notification requirements.

[40 CFR 63.6590(b)(3)(iii)]

2. New or reconstructed emergency compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP shall meet the requirements of 40 CFR Part 63, Subpart ZZZZ by complying with applicable requirements under Condition IV.C above.

[40 CFR 63.6590(c)(6)]

3. New or reconstructed CI stationary RICE with a site rating of less than or equal to 500 brake HP shall meet the requirements of 40 CFR Part 63, Subpart ZZZZ by complying with applicable requirements under Condition IV.C above.

[40 CFR 63.6590(c)(7)]

4. New or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP does not have to meet the requirements of 40 CFR Part 63, Subpart A or Subpart ZZZZ except for the initial notification requirements of 40 CFR 63.6645(f).

[40 CFR 63.6590(c)(7)]

5. Permit Shield

Compliance with the requirements of Condition IV.D above shall be deemed compliance with 40 CFR 63.6590(b)(1)(i), (b)(3)(iii), (c)(6), and (c)(7).

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

V. INTERNAL COMBUSTION ENGINES- NON EMERGENCY

A. Fuel Limitations

The Permittee shall fire only diesel in the non-emergency pump- 56 KW Perkins generators.

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

B. Affected Facilities Subject to Standards of Performance for Existing Stationary Rotating Machinery under A.A.C. R18-2-719

This Condition V.B applies to affected facilities that are non-emergency engines identified in Attachment "C" (Equipment List) as subject to A.A.C. R18-2-719.

1. Particulate Matter and Opacity

a. Emissions Limitations and Standards

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

[A.A.C. R18-2-719.C.1]

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

Where

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

Q = the heat input in million Btu per hour

- (2) 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]

b. Monitoring, Reporting, and Recordkeeping Requirements

- (1) A certified EPA Reference Method 9 observer shall conduct a monthly survey of visible emissions emanating from the stack of the diesel-fired generators, when in operation. If the opacity of the emissions observed appears to exceed the standard, the observer shall, if practicable, conduct a certified EPA Reference Method 9 observation. The Permittee shall keep records of the initial survey and any EPA Reference Method 9 observations performed. These records shall include the emission point observed, name of observer, date and time of observation, and the results of the observation. If the observation results in a Method 9 opacity reading in excess of 40%, the Permittee shall report this

to ADEQ as excess emission and initiate appropriate corrective action to reduce the opacity below 40%. The Permittee shall keep a record of the corrective action performed.

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

- (2) The Permittee shall keep records of fuel supplier certifications or other documentation containing information regarding lower heating value of the fuel. These records shall be made available to ADEQ upon request.

[A.A.C. R18-2-306.A.3.c and -719.I]

c. Permit Shield

Compliance with the Condition V.B.1 shall be deemed compliance with A.A.C. R18-2-719.C.1, E, and I.

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

2. Sulfur Dioxide

a. Emission Limitations and Standards

- (1) The Permittee shall not emit or cause to emit more than 1.0 pound of sulfur dioxide per million Btu heat input.

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

- (2) The Permittee shall not burn high sulfur diesel fuel (sulfur content greater than 0.9 % by weight) in the engine.

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

b. Monitoring, Recordkeeping, and Reporting Requirements

- (1) The Permittee shall keep records of fuel supplier certifications or other documentation to demonstrate compliance with the sulfur content limit specified in Condition V.B.2.a(2) above. The certification shall contain the sulfur content of the fuel. These records shall be made available to ADEQ upon request.

[A.A.C. R18-2-306.A.3.c and -719.I]

- (2) The Permittee shall report to the Director any daily period during which the sulfur content of the fuel being fired in the engine exceeds 0.8%.

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

c. Permit Shield

Compliance with the requirements in Condition V.B above shall be deemed compliance with A.A.C. R18-2-719.F, H, I, and J.

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

C. Affected Facilities Subject to New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines under 40 CFR Part 60, Subpart IIII

This Condition V.C applies to affected facilities that are non-emergency engines identified in Attachment "C" (Equipment List) as subject to NSPS Subpart IIII.

1. Operating Requirements

a. The Permittee shall:

- (1) Operate each engine and control device according to manufacturer's emission-related written instructions;
[40 CFR 60.4211(a)(1)]
- (2) Change only those emissions related settings that are permitted by the manufacturer; and
[40 CFR 60.4211(a)(2)]
- (3) Meet the requirements in 40 CFR 89, 94 and/or 1068, as applicable.
[40 CFR 60.4211(a)(3)]

2. Fuel Requirements

a. The Permittee shall use diesel fuel that meets the following requirements for non-road diesel fuel:
[40 CFR 60.4207(b)]

- (1) Sulfur content - 15 ppm maximum
- (2) Cetane index or aromatic content, as follows:
 - (a) A minimum cetane index of 40; or
 - (b) A maximum aromatic content of 35 volume percent
[40 CFR 80.510(b)]

3. Emission Limitations and Standards

The Permittee shall comply with the emission standards for new compression ignition (CI) engines in 40 CFR 60.4201 for their 2007 model year and later stationary CI ICE, as applicable.

[40 CFR 60.4204(b)]

4. Compliance Requirements

a. The Permittee shall purchase an engine certified to the emission standards in 40 CFR 60.4204(b) for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications, except as permitted in Condition VI.C.5.b below.

[40 CFR 60.4211(c)]

b. The Permittee shall keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if the Permittee does not install and configure the 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,

then the Permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

[40 CFR 60.4211(g)(1)]

5. Recordkeeping and Reporting Requirements

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

[40 CFR 60.4214(c)]

6. Permit Shield

Compliance with the Conditions V.C shall be deemed compliance with 40 CFR 60.4204(b), 60.4207(b), 60.4211(a)(1), (a)(2), and (a)(3), (c), (g)(1), 4214(c), and 40 CFR 80.510(b).

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

D. Affected Sources Subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE) under 40 CFR Part 63, Subpart ZZZZ

This Condition V.D applies to affected sources that are non-emergency engines identified in Attachment "C" (Equipment List) as subject to NESHAP Subpart ZZZZ.

1. New or reconstructed CI stationary RICE with a site rating of less than or equal to 500 brake HP shall meet Subpart ZZZZ requirements by complying with applicable requirements in Condition V.C above.

[40 CFR 63.6590(c)(7)]

2. Existing CI stationary RICE with a site rating of less than 100 brake HP shall meet the following:

a. General Operating Limitations/Requirements

- (1) At all times, the Permittee shall operate and maintain the engines, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by 40 CFR 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 Administrator and 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)]

- (2) The Permittee shall operate and maintain the engines and after

control device, if any, in accordance with manufacturer's emission-related written instructions or develop 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 63.6625(e)(1)]

- (3) The Permittee shall:
- (a) Change oil and filter every 1,000 hours of operation or annually, whichever comes first;
 - (b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and
 - (c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

[40 CFR 63.6602 and 40 CFR 63 Subpart ZZZZ Table 2c - Item 2]

- (4) The Permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirements in Conditions V.D.2.a(3) above. The oil analysis shall be performed at the same frequency specified for changing the oil. The analysis program must at a minimum analyze total Base Number, viscosity; and percent water content. The condemning limits for these parameters are as follows:

[40 CFR 63.6625(i)]

- (a) Total Base Number is less than 30 percent of the Total Base Number of the oil when new;
- (b) Viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or
- (c) Percent water content (by volume) is greater than 0.5.

If all of the above limits are not exceeded, the Permittee is not required to change the oil. If any of the limits are exceeded, the Permittee must change the oil within 2 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.

- (5) The Permittee shall minimize the engine's time 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)]

b. Compliance Demonstration

The Permittee shall demonstrate continuous compliance by operating and

maintaining the engines according to the manufacturer's emission-related operation and maintenance instructions or by developing and following the Permittee's own 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) and 40 CFR 63 Subpart ZZZZ - Table 6, Item 9]

c. Reporting and Recordkeeping Requirements

(1) The Permittee shall report all deviations from the applicable requirements of 40 CFR 63, Subpart ZZZZ in the annual monitoring report required pursuant to Condition I.B.2 of this Attachment. For the purpose of permit deviation reporting in Condition XII.B of Attachment "A," prompt reporting of deviations from applicable Subpart ZZZZ requirements shall mean that the Permittee report these deviations in the annual monitoring report required pursuant to Condition I.B.2 of this Attachment.

[40 CFR 63.6650(f)]

(2) The Permittee shall keep records of the following:

(a) Records of the maintenance conducted on the engines in order to demonstrate that the facility operated and maintained the engine and after-treatment control device (if any) according to the Permittee's own maintenance plan; and

[40 CFR 63.6655(e)]

(b) Records of the parameters that are analyzed under the oil analysis program option in Conditions V.D.2.a(4) above, the results of the analysis, the oil changes for the engine, and replacement of hoses and belts.

[40 CFR 63.6625(i)]

d. Permit Shield

Compliance with the requirements of Condition V.D above shall be deemed compliance with 40 CFR 6590(c)(7), 63.6602, 6605(b), 6625(e)(1), (h), and (i), 6640(a), 6650(f), and 6655(e).

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

VI. FUGITIVE DUST REQUIREMENTS

A. Applicability

This Condition applies to any non-point source of fugitive dust in the facility.

B. Particulate Matter and Opacity

Open Areas, Roadways & Streets, Storage Piles, Tailings and Material Handling

1. Emission Limitations/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 is 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 on roadways and streets 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]

- (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;

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

- (8) Take reasonable precautions to prevent excessive amounts of

particulate matter from becoming airborne at mineral tailings piles. Reasonable precautions shall include wetting, chemical stabilization, revegetation or such other measures as 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 Requirements

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.e]

[Material Permit Conditions are 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 Conditions VI.B.1.b above were performed and the control measures that were adopted.

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

- b. As an alternative to Condition VI.B.3.a above, the Permittee may follow the approved Monitoring Plan as a means of monitoring and recordkeeping for any of the activities listed in Conditions VI.B.1.b(1) through (8) above.

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

- c. Any changes in the approved Monitoring Plan shall be recorded, and a notification shall be sent to the Director within 10 days following the change.

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

- d. Opacity Monitoring Requirements

A certified EPA Reference Method 9 observer shall, bi-weekly (once every two weeks), monitor visible emissions from non-point fugitive sources. If the opacity of the emissions observed appears to exceed the standard, the observer shall conduct a certified EPA Reference Method 9 observation. The Permittee shall keep records of the initial survey and any EPA Reference Method 9 observations performed. These records shall include the emission point observed, location of observer, name of observer, date and time of observation, and the results of the observation. If the observation results in an exceedance of the opacity limit contained in Condition.VI.B.1.a above, the Permittee shall take corrective action and log all such actions. Such exceedance shall be reported as excess emissions in accordance with Condition XII.A.1 of Attachment "A".

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

4. Permit Shield

Compliance with the requirements of Condition VI shall be deemed compliance with A.A.C. R18-2-604.A and B, -605, -606, -607, 608, and -614.

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

VII. MOBILE SOURCE REQUIREMENTS

A. Applicability

The requirements of this Condition apply 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. R18-2-101.109.

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

B. Particulate Matter and Opacity

1. Emission Limitations/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 ten consecutive seconds, the opacity of which exceeds 40%. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten 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 ten consecutive seconds, the opacity of which exceeds 40%. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten 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]

c. 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 the Permittee's 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 requirements of Condition VII above shall be deemed compliance with A.A.C. R18-2-801, -802, and -804.

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

VIII. OTHER PERIODIC ACTIVITIES

A. Abrasive Blasting

1. Particulate Matter and Opacity

a. Emission Limitations/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

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 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 VIII.A above 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/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 VIII.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 this Condition, 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

Conditions VIII.B.1.a(3) above, 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 VIII.B.1.b(1) above.

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

c. Permit Shield

Compliance with the requirements of Condition VIII.B.1 above shall be deemed compliance with A.A.C.R18-2-727.

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

2. Opacity

a. Emission Limitation/Standard

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 requirements of Condition VIII.B.2 above 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 Limitation/Standard

The Permittee shall comply with all of the 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 VIII.C above shall be deemed compliance with A.A.C. R18-2-1101.A.12.

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

ATTACHMENT “C”: EQUIPMENT LIST

Description	Size	Make/Model	Serial Number	Date of Manufacture /Installation	Equipment ID	Subject to Article 7	Subject to NSPS	Subject to NESHAP
Tankhouse Boiler 1	34 MMBtu/hr	Cleaver Brooks D-42	L2208	3/1989	707Boiler1	A.A.C. R18-2-724	No	Subpart DDDDD
Tankhouse Boiler 2	34 MMBtu/hr	Cleaver Brooks D-42	WL-2210	3/1989	707Boiler2	A.A.C. R18-2-724	No	Subpart DDDDD
Tankhouse Boiler 3	32 MMBtu/hr	Johnston PFTY800-4LG150S	9653-01	1997	707Boiler3	No	Subpart Dc	Subpart DDDDD
Propane Water Heater	1 MMBtu/hr	Sioux D1000	9612082	1996	P4	A.A.C. R18-2-724	No	No
Miscellaneous (Space and Water) Heaters	4.26 MMBtu/hr	N/A	N/A	N/A	--	A.A.C. R18-2-724	No	No
Diesel Fired Emergency Generator	750 kw	Caterpillar/ 3412 Dista packaged	N/A	N/A	BCW00169	A.A.C. R18-2-719	No	Subpart ZZZZ
Diesel Fired Emergency Generator	750 kw	Caterpillar/ 3412 Dista packaged	N/A	N/A	BCW00406	A.A.C. R18-2-719	No	Subpart ZZZZ
Gas-fired Emergency Generator	765 KW	CAT/3516	4EK00104	11/12/1993	TBA	A.A.C. R18-2-719	No	Subpart ZZZZ
Diesel-fired Emergency Generator	35 kW	Cummins	35DSFAA	2011	TBA	No	Subpart IIII	Subpart ZZZZ
Diesel-fired Emergency Generator	25 kW	Cummins	35DSKCA	2011	TBA	No	Subpart IIII	Subpart ZZZZ

Description	Size	Make/Model	Serial Number	Date of Manufacture /Installation	Equipment ID	Subject to Article 7	Subject to NSPS	Subject to NESHAP
Non-Emergency Pump	56 kW (75 hp)	Perkins DV150	0253147	2006	WP01	A.A.C. R18-2-719	No	Subpart ZZZZ
Non-Emergency Pump	56 kW (75 hp)	Perkins DV150	216722200	2004	WP02	A.A.C. R18-2-719	No	Subpart ZZZZ
Non-Emergency Pump	56 kW (75 hp)	Godwin/Deere 4045T	PE1045R893593	9/2012	WP04	No	Subpart IIII	Subpart ZZZZ
Non-Emergency Back-up Pump	56 kW (75 hp)	Godwin/Deere 4045T	PE4045R875587	4/2012	Pump #14	No	Subpart IIII	Subpart ZZZZ
Non-Emergency Back-up Pump	56 kW (75 hp)	Godwin/Deere 4045T	PE4045R878558	5/2012	Pump #15	No	Subpart IIII	Subpart ZZZZ
Starter Sheet Prep Equipment	N/A	N/A	N/A	N/A	N/A	No	No	No

Storage Tanks

Tank	Tank No.	Capacity
SX surge tanks 1 and 2	1 & 2	100,000 gal each
Diluent storage tank	-	30,000 gal
Grungee storage tank(2)	-	11,000 gal each
Acid storage (2)	10822, 10821	10,000 tons each
Mixer settler tanks (8)	11129-32, 11262-65	119,700 gal each
Electrolyte surge tanks (4)	11145,11150,11278, 11283	25,000 gal each



Tank	Tank No.	Capacity
Electrowinning cells tank house (3)	50036, 50028, 39825	3,675 gal each
Electrolyte storage tanks (2)	MIT750RESV	375,000 gal each
Organic recovery tanks (2)	--	750 gal each