

DRAFT PERMIT

CLASS II AIR QUALITY PERMIT

DRAFT PERMIT No. 99662

PERMITTEE: Excelsior Mining JCM, Inc.

FACILITY: Johnson Camp Mine

PLACE ID: 5683

DATE ISSUED: Date Pending EXPIRY DATE: Date Pending

SUMMARY

This Class II air quality permit is issued to Excelsior Mining JCM, Inc., the Permittee, for the continued operation of the Johnson Camp Mine. The facility is located approximately 65 miles east of Tucson, AZ in Cochise County. This permit renews and supersedes Permit No. 71633.

The facility's potential to emit (PTE) for all criteria air pollutants, without controls or operating limitations, is less than the major source thresholds, but greater than the significant level thresholds for particulate matter as identified in Arizona Administrative Code (A.A.C.) R18-2-101.131. Therefore, a Class II permit is required per A.A.C. R18-2-302.B.2.a.

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





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ATTACHMENT "A": GENERAL PROVISIONS

I. PERMIT EXPIRATION AND RENEWAL

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

[A.R.S. § 49-426.F, A.A.C. R18-2-306.A.1]

B. The Permittee shall submit an application for renewal of this permit at least six (6) months, but not more than eighteen (18) months, prior to the date of permit expiration.

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

II. COMPLIANCE WITH PERMIT CONDITIONS

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

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

B. It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

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

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

A. The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

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

- **B.** The permit shall be reopened and revised under any of the following circumstances:
 - 1. The Director or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; and

[A.A.C. R18-2-321.A.1.c]

2. The Director or the Administrator determines that the permit needs to be revised or revoked to assure compliance with the applicable requirements.

[A.A.C. R18-2-321.A.1.d]





C. Proceedings to reopen and issue a permit, including appeal of any final action relating to a permit reopening, shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable. Permit reopenings shall not result in a resetting of the five-year permit term.

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

IV. POSTING OF PERMIT

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

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

1. Current permit number; or

[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 A.R.S. § 49-426(E) and A.A.C. R18-2-326. [A.A.C. R18-2-306.A.9 and -326]

VI. EMISSIONS INVENTORY QUESTIONNAIRE

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

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

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

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

C. The Permittee shall submit to the Director an amendment to an emissions inventory questionnaire, containing the documentation required by A.A.C. R18-2-327.A.3, whenever the Permittee discovers or receives notice, within two years of the original submittal, that incorrect or insufficient information was submitted to the Director by a previous emissions inventory questionnaire. The amendment shall be submitted to the Director within 30 days of discovery or receipt of notice. If the incorrect or insufficient information resulted in an incorrect annual emissions fee, the Director shall require that additional payment be made





or shall apply an amount as a credit to a future annual emissions fee. The submittal of an amendment shall not subject the Permittee to an enforcement action or a civil or criminal penalty if the original submittal of incorrect or insufficient information was not due to willful neglect.

[A.A.C. R18-2-327.A.4]

VII. COMPLIANCE CERTIFICATION

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

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

- **B.** The compliance certifications shall include the following:
 - 1. Identification of each term or condition of the permit that is the basis of the certification;

[A.A.C. R18-2-309.2.c.i]

2. Identification of the methods or other means used by the Permittee for determining the compliance status with each term and condition during the certification period;

[A.A.C. R18-2-309.2c.ii]

3. Status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certifications shall identify each deviation (including any deviations reported pursuant to Condition XII.B of this Attachment) during the period covered by the certification and take it into account for consideration in the compliance certification

[A.A.C. R18-2-309.2.c.iii]

4. Other facts the Director may require in determining the compliance status of the source.

[A.A.C. R18-2-309.2.c.iv]

C. A progress report on all outstanding compliance schedules shall be submitted every six months beginning six months after permit issuance.

[A.A.C. R18-2-309.5.d]

VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS

Any document required to be submitted by this permit, including reports, shall contain a certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[A.A.C. R18-2-309.3]



IX. INSPECTION AND ENTRY

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

- A. Enter upon the Permittee's premises where a source is located, emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;

 [A.A.C. R18-2-309.4.a]
- **B.** Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;

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

C. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

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

D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and

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

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

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

X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD

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

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

XI. ACCIDENTAL RELEASE PROGRAM

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

[40 CFR Part 68]

XII. EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCY REPORTING

A. Excess Emissions Reporting

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

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

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

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(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 report shall contain the following information:
 - (1) Identity of each stack or other emission point where the excess emissions occurred;

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

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

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

- (3) Time and duration, or expected duration, of the excess emissions; [A.A.C. R18-2-310.01.B.3]
- (4) Identity of the equipment from which the excess emissions emanated;

[A.A.C. R18-2-310.01.B.4]

(5) Nature and cause of the emissions;

[A.A.C. R18-2-310.01.B.5]

(6) If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions;

[A.A.C. R18-2-310.01.B.6]

(7) Steps that were or are being taken to limit the excess emissions; and

[A.A.C. R18-2-310.01.B.7]

(8) If the excess emissions resulted from start-up or malfunction, the report shall contain a list of the steps taken to comply with the permit procedures governing source operation during periods of startup or malfunction.

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

2. In the case of continuous or recurring excess emissions, the notification requirements shall be satisfied if the source provides the required notification after excess emissions are first detected

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and includes in such notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period, or changes in the nature of the emissions as originally reported, shall require additional notification pursuant to Condition XII.A.1 above.

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

B. Permit Deviations Reporting

The Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Where the applicable requirement contains a definition of prompt or otherwise specifies a timeframe for reporting deviations, that definition or timeframe shall govern. Where the applicable requirement does not address the timeframe for reporting deviations, the Permittee shall submit reports of deviations according to the following schedule:

1. Notice that complies with Condition XII.A above is prompt for deviations that constitute excess emissions;

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

2. Notice that is submitted within two (2) working days of discovery of the deviation is prompt for deviations of permit conditions identified by Condition XXII.B.1 of Attachment "B";

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

3. Except as provided in Conditions XII.B.1 and 2, prompt notification of all other types of deviations shall be annually, concurrent with the annual compliance certification required in Section VII, and can be submitted via myDEQ, the Arizona Department of Environmental Quality's online portal.

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

C. Emergency Provision

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- **D.** Affirmative Defenses for Excess Emissions Due to Malfunctions, Startup, and Shutdown
 - 1. Applicability

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

a. Promulgated pursuant to Sections 111 or 112 of the Act;

[A.A.C. R18-2-310.A.1] [State Enforceable Only]

b. Promulgated pursuant to Titles IV or VI of the Clean Air Act;

[A.A.C. R18-2-310.A.2] [State Enforceable Only]

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]



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[State Enforceable Only]

d. Contained in A.A.C. R18-2-715.F; or

[A.A.C. R18-2-310.A.4] [State Enforceable Only]

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]

[State Enforceable Only]

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] [State Enforceable Only]

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] [State Enforceable Only]

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] [State Enforceable Only]

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] [State Enforceable Only]

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] [State Enforceable Only]

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] [State Enforceable Only]



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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] [State Enforceable Only]

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] [State Enforceable Only]

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] [State Enforceable Only]

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

[A.A.C. R18-2-310.B.9] [State Enforceable Only]

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

[A.A.C. R18-2-310.B.10] [State Enforceable Only]

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

[A.A.C. R18-2-310.C.1] [State Enforceable Only]

(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] [State Enforceable Only]

(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]

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[State Enforceable Only]

(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] [State Enforceable Only]

(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] [State Enforceable Only]

(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] [State Enforceable Only]

(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] [State Enforceable Only]

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

[A.A.C. R18-2-310.C.1.g] [State Enforceable Only]

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

[A.A.C. R18-2-310.C.1.h] [State Enforceable Only]

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] [State Enforceable Only]

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] [State Enforceable Only]

5. Demonstration of Reasonable and Practicable Measures

For an affirmative defense under Condition XII.D.2 or XII.D.3, the Permittee shall demonstrate, through submission of the data and information required by this Condition XII.D and Condition XII.A.1 above, that all reasonable and practicable measures within the Permittee's control were implemented to prevent the occurrence of the excess emissions.

[A.A.C. R18-2-310.E] [State Enforceable Only]

XIII. RECORDKEEPING REQUIREMENTS

- **A.** The Permittee shall keep records of all required monitoring information including, but not limited to, the following:
 - 1. The date, place as defined in the permit, and time of sampling or measurements;

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

2. The date(s) any analyses were performed;

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

- 3. The name of the company or entity that performed the analyses; [A.A.C. R18-2-306.A.4.a.iii]
- 4. A description of the analytical techniques or methods used;

 [A.A.C. R18-2-306.A.4.a.iv]
- 5. The results of analyses; and

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

6. The operating conditions as existing at the time of sampling or measurement.

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

B. The Permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings or other data recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

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

XIV. DUTY TO PROVIDE INFORMATION

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

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





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

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

XV. PERMIT AMENDMENT OR REVISION

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

A. Facility Changes that Require a Permit Revision;

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

B. Administrative Permit Amendment;

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

C. Minor Permit Revision; and

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

D. Significant Permit Revision.

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

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

XVI. FACILITY CHANGE WITHOUT A PERMIT REVISION

A. Except for a physical change or change in the method of operation at a Class II source requiring a permit revision under A.A.C. R18-2-317.01, or a change subject to logging or notice requirements in Condition XVI.B, a change at a Class II source shall not be subject to revision, notice, or logging requirements under this Section.

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

B. The following changes may be made if the source keeps on site records of the changes according to Condition XVI.H below:

[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)



XVI. FACILITY CHANGE WITHOUT A PERMIT REVISION

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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. 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: seven 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: seven 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: seven days. For purposes of this subsection, reconstruction of a source or an affected facility shall be presumed if the fixed capital cost of the new components exceeds 50% of the fixed capital cost of a comparable entirely new source or affected facility and the changes to the components have occurred over the 12 consecutive months beginning with commencement of construction; and

[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.
- **D.** For each change under Condition XVI.C, the written notice shall be by certified mail or hand delivery and shall be received by the Director the minimum amount of time in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided with less than required notice, but must be provided as far in advance of the change, or if advance notification is not practicable, as soon after the change as possible. The written notice shall include:

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

1. When the proposed change will occur,

[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. The permit shield described in A.A.C. R18-2-325 shall not apply to any change made under this Section, other than implementation of an alternate operating scenario under Condition XVI.B.1.

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

F. Notwithstanding any other part of this Section, the Director may require a permit to be revised for any change that, when considered together with any other changes submitted by the Permittee under this Section over the term of the permit, constitutes a change under subsection A.A.C. R18-2-317.01.A.

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

G. A copy of all logs required under Condition XVI.B shall be filed with the Director within 30 days after each anniversary of the permit issuance date. If no changes were made at the source requiring logging, a statement to that effect shall be filed instead.

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

H. Logging Requirements

[Arizona Administrative Code, Appendix 3]

1. Each log entry required by a change under Condition XVI.B shall include at least the following information:





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

XVII. TESTING REQUIREMENTS

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

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

B. Operational Conditions during Performance Testing

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

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

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

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

D. Test Plan

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

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



XVII. TESTING REQUIREMENTS

- 1. Test duration;
- 2. Test location(s);
- 3. Test method(s); and
- 4. Source operation and other parameters that may affect test results.

E. Stack Sampling Facilities

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

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

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

F. Interpretation of Final Results

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

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

G. Report of Final Test Results

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



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

H. Extension of Performance Test Deadline

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

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

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

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

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

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

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

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

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

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

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





or terrorism, or equipment failure or safety hazard beyond the control of the Permittee.

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

XVIII. PROPERTY RIGHTS

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

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

XIX. SEVERABILITY CLAUSE

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

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

XX. PERMIT SHIELD

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

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

XXI. PROTECTION OF STRATOSPHERIC OZONE

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

[40 CFR Part 82]

XXII. APPLICABILITY OF NSPS/NESHAP GENERAL PROVISIONS

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

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



ATTACHMENT "B": SPECIFIC CONDITIONS

I. FACILITY-WIDE REQUIREMENTS

A. Opacity

- 1. Instantaneous Surveys and Six-Minute Observations
- a. Instantaneous Surveys

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

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

- (1) Alternative Method ALT-082 (Digital Camera Operating Technique)
 - (a) The Permittee, or Permittee representative, shall be certified in the use of Alternative Method ALT-082.
 - (b) The results of all instantaneous surveys and six-minute observations shall be obtained within 30 minutes of completing the observation.
- (2) EPA Reference Method 9 Certified Observer.

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

b. Six-Minute Observations

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

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

- (1) Alternative Method ALT-082 (Digital Camera Operating Technique)
 - (a) The Permittee, or Permittee representative, shall be certified in the use of Alternative Method ALT-082.
 - (b) The results of all instantaneous surveys and six-minute observations shall be obtained within 30 minutes of completing the observation.
- (2) EPA Reference Method 9.
- c. The Permittee shall have on site or on call a person certified in EPA Reference Method 9 unless all six-minute Method 9 observations required by this permit are conducted as a six-minute Alternative Method ALT-082 (Digital Camera Operating Technique) and all instantaneous visual surveys required by this permit are conducted as an instantaneous ALT-





082 camera survey. Any six-minute Method 9 observation required by this permit can be conducted as a six-minute Alternative Method ALT-082 and any instantaneous visual survey required by this permit can be conducted as an instantaneous ALT-082 camera survey.

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

- 2. Monitoring, Recordkeeping, and Reporting Requirements [A.A.C. R18-2-306.A.3.c]
- a. At the frequency specified in the following sections of this permit, the Permittee shall conduct an instantaneous survey of visible emissions from both process stack sources, when in operation, and fugitive dust sources.
- b. If the visible emissions on an instantaneous basis appears less than or equal to the applicable opacity standard, then the Permittee shall keep a record of the name of the observer, the date on which the instantaneous survey was made, and the results of the instantaneous survey.
- c. If the visible emissions on an instantaneous basis appears greater than the applicable opacity standard, then the Permittee shall immediately conduct a six-minute observation of the visible emissions.
 - (1) If the six-minute observation of the visible emissions is less than or equal to the applicable opacity standard, then the Permittee shall record the name of the observer, the date on which the six-minute observation was made, and the results of the six-minute observation.
 - (2) If the six-minute observation of the visible emissions is greater than the applicable opacity standard, then the Permittee shall do the following:
 - (a) Adjust or repair the controls or equipment to reduce opacity to less than or equal to the opacity standard;
 - (b) Record the name of the observer, the date on which the six-minute observation was made, the results of the six-minute observation, and all corrective action taken; and
 - (c) Report the event as an excess emission for opacity in accordance with Condition XII.A of Attachment "A".
 - (d) Conduct another six-minute observation to document the effectiveness of the adjustments or repairs completed.

B. Recordkeeping and Reporting Requirements

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

XXIII. METALLIC MINERAL PROCESSING SUBJECT TO NSPS SUBPART LL

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

- a. Condition XXV.C.1; and
- b. Condition XXV.C.2.
 - 2. The Permittee shall submit reports of all monitoring activities required in Attachment "B" along with the annual compliance certification required by Section VII of Attachment "A."

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

XXIII. METALLIC MINERAL PROCESSING SUBJECT TO NSPS SUBPART LL

A. Applicability

This Section applies to the mobile crusher (CR-01) and mobile crusher screen (SC-01).

- **B.** Particulate Matter and Opacity
 - 1. The Permittee shall not cause to be discharged into the atmosphere any stack emissions that contain particulate matter in excess of 0.05 grams per dry standard cubic meter.

[40 CFR 60.382(a)(1)]

2. <u>The Permittee shall not cause to be discharged into the atmosphere</u> any stack emissions that exhibit greater than 7 percent opacity unless the stack emissions are discharged from a wet scrubbing emissions control device.

[40 CFR 60.382(a)(2) and A.A.C. R18-2-331.A.3.f] [Material permit conditions are identified by underline and italics]

3. The Permittee shall not cause to be discharge into the atmosphere from the affected facility any process fugitive emissions that exhibit greater than 10 percent opacity.

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

[Material permit conditions are identified by underline and italics]

C. Air Pollution Control Requirements

Water sprays, or an equivalent control, shall be used to control visible emissions from the mobile crusher and screen.

[40 CFR 60.382(a)(1), (a)(2), and (b), and A.A.C. R-18-2-331.A.3.e] [Material permit conditions are identified by underline and italics]

D. Monitoring and Recordkeeping Requirements

Every month, the Permittee shall monitor visible emissions in accordance with Condition XXII.A of Attachment "B".

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

E. Performance Test Requirements

XXIV. METALLIC MINERAL PROCESSING SUBJECT TO A.A.C. R18-2-721

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1. The Permittee shall use EPA Method 5 or 17 to determine particulate matter concentration. The sample volume for each run shall be at least 60 dscf. The sampling probe and filter holder of Method 5 may be operated without heaters if the gas stream being sampled is at ambient temperature. For gas streams above ambient temperature, the Method 5 sampling train shall be operated with a probe and filter temperature slightly above the effluent temperature (up to a maximum filter temperature of 250°F) in order to prevent water condensation on the filter.

[40 CFR 60.386(b)(1)]

2. EPA Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity from stack emissions and process fugitive emissions.

[40 CFR 60.386(b)(2)]

F. Permit Shield

Compliance with the Conditions of this Section shall be deemed compliance with 40 CFR 60.382, 386(b)(1) and (2).

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

XXIV. METALLIC MINERAL PROCESSING SUBJECT TO A.A.C. R18-2-721

A. Applicability

This Section applies to storage piles and material transfer points of ore and ammonium nitrate and fuel oil.

- **B.** Particulate Matter and Opacity
 - 1. Emission Limitations and Standards
 - a. The Permittee shall not cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any process source in total quantities in excess of the amounts calculated by one of the following equations:
 - (1) For process sources having a process weight rate of 30 tons per hour or less, the maximum allowable emissions shall be determined by the following equation:

 $E = 4.10P^{0.67}$

Where:

E = the maximum allowable particulate emissions rate in poundsmass per hour.

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

XXIV. METALLIC MINERAL PROCESSING SUBJECT TO A.A.C. R18-2-721

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[A.A.C. R18-2-721.B.1]

(2) For process sources having a process weight rate greater than 30 tons per hour, the maximum allowable emissions shall be determined by the following equation:

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

Where E and P are defined as indicated in Condition XXIV.B.1.a(1) above.

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

b. For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emissions of particulate matter.

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

c. The opacity of any plume or effluent from any process source shall not be greater than 20%.

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

d. If the presence of uncombined water is the only reason for an exceedance of the visible emissions requirements in Condition XXIV.B.1.c above, the exceedance shall not constitute a violation of the applicable opacity limit.

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

2. Air Pollution Control Requirements

<u>The Permittee shall, to the extent practicable, install, operate</u> and maintain <u>water</u> sprays to control particulate matter emissions from the following:

- a. The Unload Sulfide Ore to Sulfide Ore Stockpile (DP-1) Transfer Point;
- b. The Screen to Crusher Feed Hopper (DP-2) Transfer Point;
- c. The Crusher Feed Hopper to Crusher (DP-3) Transfer Point;
- d. The Crusher to Output Conveyor (DP-4) Transfer Point;
- e. The Conveyor to Crushed Sulfide Ore Stockpile (DP-5) Transfer Point; and
- f. The Unload Oxide Ore to Heap Leach Pad (DP-6) Transfer Point.

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

 [Material Permit Conditions are indicated by underline and italics]
 - 3. Monitoring, Reporting and Recordkeeping Requirements



XXV. SOLVENT EXTRACTION/ELECTROWINNING PROCESSES (SX/EW)

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a. The Permittee shall conduct a bi-weekly survey of visible emissions emanating from all the sources covered by this Section in accordance with Condition XXII.A.

[A.A.C. R18-2-306.A.3.c and -306.A.4]

4. Permit Shield

Compliance with the Conditions of this Section shall be deemed compliance with A.A.C. R18-2-702.B.3, 702.C and 721.B, D and F.

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

XXV. SOLVENT EXTRACTION/ELECTROWINNING PROCESSES (SX/EW)

A. Applicability

This Section applies to the solvent extraction/electrowinning processes.

- **B.** Emission Limitations and Standards
 - 1. Materials including solvents or other volatile compounds, acids and alkalis utilized in the SX/EW processes shall be processed, stored, used and transported in such a manner and by such means that they will not evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage or discharge, the installation and use of such control methods, devices or other equipment shall be mandatory.

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

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

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

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

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

- **C.** Air Pollution Control Requirements
 - 1. <u>The Permittee shall maintain and use covers on the SX mixer settler tanks and the SX Organic Recovery Sump Tank to control emissions from the Solvent Extraction Plant.</u>





[Condition VI.C.1 of Installation Permit No. 46673 and A.A.C. R18-2-303.B]
[Material permit conditions are indicated by underline and italics]

- 2. <u>The Permittee shall use one or more of the following methods to control emissions from the Electrowinning Tankhouse Cells:</u>
- a. Foam;
- b. Dispersion Balls;
- c. Surfactants;
- d. Blankets;
- e. <u>Brushes;</u>
- f. Water foggers; or
- g. <u>Other effective means of controlliacid emissions approved by the Director.</u>
 [Condition VI.C.2 of Installation Permit No. 46673 and A.A.C. R18-2-303.B]
- **D.** Monitoring, Reporting and Recordkeeping Requirement

The Permittee shall maintain records of each control measure used and the date it was used to limit emissions from the solvent extraction/electrowinning processes..

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

E. Permit Shield

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

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

XXVI. EVAPORATION PROCESSES

A. Applicability

This Section applies to the PLS/Draindown Pond Evaporators (EVAP-1 through EVAP-6), the Senninger Heap Leach Evaporative Vertical Spray Nozzles (HEAP-EVAP1), the BETE Heap Leach Evaporative Vertical Spray Nozzles (HEAP-EVAP2) and the Gunnison Copper Project (GCP) Pond Evaporators (EVAP-7, EVAP-8 and EVAP-9).

- **B.** Operational Limitations
 - 1. The Permittee shall not emit gaseous or odorous materials from equipment, operations or premises in such quantities or concentrations as to cause air pollution.

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

2. 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]

3. The Permittee shall not operate any combination of PLS/Draindown Pond Evaporators, Senninger Heap Leach Evaporative Spray Nozzles and BETE TF8M Evap Vertical Spray Nozzles in excess of the following six (6) optional configurations as shown in the following table:

Option	PLS/Draindown Pond Evaporators (No. of Units)	Senninger Heap Leach Spray Nozzles (No. of Units)	BETE TF8M Evap Vertical Spray Nozzles (No. of Units)		
Α	1	1,200	1,200		
В	2	1,150	1,150		
C	3	1,100	1,100		
D	4	1,050	1,050		
E	5	1,000	1,000		
F	6	950	950		

[A.A.C. R18-2-306.01.A]

C. Particulate Matter and Opacity

- 1. Emission Limitations 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 identified above 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:

 $E = 4.10P^{0.67}$

where:

E= the maximum allowable particulate emissions rate in poundsmass 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 = the maximum allowable particulate emissions rate in poundsmass per hour.

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

b. The Permittee shall not cause, allow or permit visible emissions from the equipment identified above in excess of 20% opacity..

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

2. Monitoring, Reporting and Recordkeeping Requirement

The Permittee shall conduct a quarterly survey of visible emissions in accordance with Condition XXII.A.1 of Attachment "B".

D. Permit Shield

Compliance with Conditions of this Section shall be deemed compliance with A.A.C. R18-2-702.B, -730.D, -730.G and -730.A.1.

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

XXVII.ELECTROLYTE HEATERS

A. Applicability

This Section applies to the Electrolyte Heater (HTR-5) and the Backup Electrolyte Heater (HTR-6).

B. Operational Limitations

The Permittee shall burn only natural gas in the electrolyte heaters.

[Condition V.B.1 of (Installation) Permit No. 46673, A.A.C. R18-2-303.B]

C. Particulate Matter

Emission Limitation

The Permittee shall not cause, allow or permit the emissions of particulate matter, caused by combustion of fuel, from the electrolyte heater in excess of the amounts calculated by the following equation:

 $E = 1.020^{0.769}$

Where:

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

Q = the heat input in million Btu per hour.

XXVIII. GASOLINE DISPENSING FACILITY

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[A.A.C. R18-2-724.C.1]

D. Permit Shield

Compliance with the Conditions of this Section shall be deemed compliance with A.A.C.R18-2-724.C.1.

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

XXVIII. GASOLINE DISPENSING FACILITY

A. Applicability

This Section applies to the 1,000-gallon gasoline storage tank (Unleaded 1) and its associated gasoline dispensing operations.

B. Emission Limitations and Standards

1. The gasoline storage tank shall be equipped with a submerged filling device, or acceptable equivalent, for the control of hydrocarbon emissions.

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

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

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

- 3. The following standards apply to the gasoline storage tank (Unleaded 1) with a monthly throughput less than 10,000 gallons:
- a. The Permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
 - (1) Minimize gasoline spills;

[40 CFR 63.11116(a)(1)]

(2) Clean up spills as expeditiously as practicable;

[40 CFR 63.11116(a)(2)]

(3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;

[40 CFR 63.11116(a)(3)]

(4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

[40 CFR 63.11116(a)(4)]

XXVIII. GASOLINE DISPENSING FACILITY

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b. If the facility's gasoline storage tank ever has a monthly throughput of 10,000 gallons of gasoline or more, the Permittee shall comply with the requirements in 40 CFR 63.11117. The facility shall remain subject to the requirements under 40 CFR 63.11117, even if the throughput later falls below the 10,000 gallons throughput threshold.

[40 CFR 63.11111(c)]

- **C.** Monitoring and Recordkeeping Requirements
 - 1. The Permittee shall maintain a file of the typical Reid vapor pressure of the gasoline stored in the tank, dates of storage in the tank, and of dates when the storage tank is empty.

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

2. The Permittee shall maintain records of monthly throughput of gasoline (total volume of gasoline that is loaded into, or dispensed from, the gasoline storage tank during a month). Monthly throughput shall be calculated by summing the volume of gasoline loaded into, or dispensed from, the gasoline storage tank during the current day, plus the total volume of gasoline loaded into, or dispensed from, the gasoline storage tank during the previous 364 days, and then dividing that sum by 12. The Permittee must have these records available within 24 hours of a request by the Director or the EPA Administrator to document gasoline throughput. These records should be kept for a period of 5 years.

[40 CFR 63.11111(e), 40 CFR 63.11116(b) and 40 CFR 63.11132]

- 3. The Permittee shall determine and record the average monthly storage temperature and true vapor pressure of the gasoline stored at such temperature if either:
- a. The gasoline has a true vapor pressure, as stored, greater than 26 mm Hg (0.5 psia) but less than 78 mm Hg (1.5 psia) and is stored in a tank other than one equipped with a floating roof, a vapor recovery system or their equivalents; or
- b. The gasoline has a true vapor pressure, as stored, greater than 470 mm Hg (9.1 psia) and is stored in a tank other than one equipped with a vapor recovery system or its equivalent.

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

4. The average storage temperature shall be an arithmetic average calculated for each calendar month, or portion thereof, if storage is for less than a month, from bulk liquid storage temperatures determined at least once every (7) seven days.

[A.A.C. R18-2-710.E.3]

5. The true vapor pressure shall be determined by the procedures in American Petroleum Institute Bulletin 2517, amended as of February 1980 (and no future editions). The true vapor pressure



may be determined by using the average monthly storage temperature and the typical Reid vapor pressure. For gasoline for which certified specifications limiting the Reid vapor pressure exist, the Reid vapor pressure may be used. For gasoline in which such certified specifications do not exist, supporting analytical data must be made available upon request to the Director when typical Reid vapor pressure is used.

[A.A.C. R18-2-710.E.4]

D. Permit Shield

Compliance with the Conditions of this Section shall be deemed compliance with A.A.C. R18-2-710.B, 710.D, 710.E.1, 2, 3, and 4, 40 CFR 63.11111(c) and (e), 63.11113(b), 63.11116(a)(1)-(4) and (b), and 63.11132.

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

XXIX. FUGITIVE DUST REQUIREMENTS

A. Applicability

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

B. Particulate Matter and Opacity

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

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

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

- b. The Permittee shall employ the following reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne:
 - (1) Keep dust and other types of air contaminants to a minimum in an open area where construction operations, repair operations, demolition activities, clearing operations, leveling operations, or any earth moving or excavating activities are taking place, by good modern practices such as using an approved dust suppressant or adhesive soil stabilizer, paving, covering, landscaping, continuous wetting, detouring, barring access, or other acceptable means;

[A.A.C. R18-2-604.A]

(2) Keep dust to a minimum from driveways, parking areas, and vacant lots where motor vehicular activity occurs by using an approved dust suppressant, or adhesive soil stabilizer, or by paving, or by barring access to the property, or by other acceptable means;

[A.A.C. R18-2-604.B]





(3) Keep dust and other particulates to a minimum by employing dust suppressants, temporary paving, detouring, wetting down or by other reasonable means when a roadway or alley is used, repaired, constructed, or reconstructed;

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

(4) Take reasonable precautions, such as wetting, applying dust suppressants, or covering the load when transporting material likely to give rise to airborne dust. Earth or other material that is deposited by trucking or earth moving equipment shall be removed from paved streets by the person responsible for such deposits;

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

(5) Take reasonable precautions, such as the use of spray bars, wetting agents, dust suppressants, covering the load, and hoods when crushing, screening, handling, transporting or conveying of materials or other operations likely to result in significant amounts of 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) Operate mineral tailings piles by taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne. Reasonable precautions shall mean wetting, chemical stabilization, revegetation or such other measures as are approved by the Director;

[A.A.C. R18-2-608]

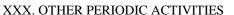
(9) Any other method as proposed by the Permittee and approved by the Director.

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

- 2. Monitoring and Recordkeeping Requirements
- a. The Permittee shall maintain records of the dates on which any of the activities listed in Condition XXIX.B.1.b above were performed and the control measures that were adopted.

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

b. Opacity





Each month, the Permittee shall monitor visible emissions from fugitive sources in accordance with Condition XXII.A of Attachment "B".

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

C. Permit Shield

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

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

XXX. OTHER PERIODIC ACTIVITIES

A. Abrasive Blasting

- 1. Particulate Matter and Opacity
- a. Emission Limitations and Standards

The Permittee shall not cause or allow sandblasting or other abrasive blasting without minimizing dust emissions to the atmosphere through the use of good modern practices. Good modern practices include:

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

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

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

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

- 2. Monitoring and Recordkeeping Requirement
- a. Each time an abrasive blasting project is conducted, the Permittee shall make a record of the following:

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

- (1) The date the project was conducted;
- (2) The duration of the project; and
- (3) Type of control measures employed.
- b. Each time an abrasive blasting project is conducted, the Permittee shall monitor visible emissions from the project in accordance with Condition XXII.A of Attachment "B".



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

3. Permit Shield

Compliance with Condition XXX.A.1.a shall be deemed compliance with A.A.C. R18-2-702.B.3 and -726.

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

B. Use of Paints

- 1. Volatile Organic Compounds
- a. Emission Limitations and Standards

While performing spray painting operations, the Permittee shall comply with the following requirements:

- (1) The Permittee shall not conduct or cause to be conducted any spray-painting operation without minimizing organic solvent emissions. Such operations, other than architectural coating and spot painting, shall be conducted in an enclosed area equipped with controls containing no less than 96 percent of the overspray.

 [A.A.C. R18-2-727.A]
- (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 XXX.B.1.a(1), a photochemically reactive solvent shall be any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified in Condition XXX.B.1.a(2), or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:

[A.A.C. R18-2-727.C]

(a) A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturation-hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones: 5 percent.

[A.A.C. R18-2-727.C.1]

(b) A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: 8 percent.



[A.A.C. R18-2-727.C.2]

(c) A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent.

[A.A.C. R18-2-727.C.3]

(4) Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups of organic compounds described in Condition XXX.B.1.a(3), it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents.

[A.A.C. R18-2-727.D]

- b. Monitoring and Recordkeeping Requirements
 - (1) Each time a spray painting project is conducted, the Permittee shall make a record of the following:

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

- (a) The date the project was conducted;
- (b) The duration of the project;
- (c) Type of control measures employed;
- (d) Safety Data Sheets (SDS) for all paints and solvents used in the project; and
- (e) The amount of paint consumed during the project.
- (2) Architectural coating and spot painting projects shall be exempt from the recordkeeping requirements of Condition XXX.B.1.b(1).
- c. Permit Shield

Compliance with Condition XXX.B.1.a shall be deemed compliance with A.A.C. R18-2-727.

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

- 2. Opacity
- a. Emission Limitation and 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. Monitoring, Recordkeeping and Reporting Requirements





Each time a spray-painting project is conducted, the Permittee shall monitor visible emissions in accordance with Condition XXII.A of Attachment "B".

c. Permit Shield

Compliance with Condition XXX.B.2.a 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 and Standard

The Permittee shall comply with all of the requirements of 40 CFR 61 Subpart M for National Emission Standards for Hazardous Air Pollutants - Asbestos.

[A.A.C. R18-2-1101.A.12]

2. Monitoring and Recordkeeping Requirement

The Permittee shall keep all required records in a file. The required records shall include the "NESHAP Notification for Renovation and Demolition Activities" form and all supporting documents.

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

3. Permit Shield

Compliance with the Condition XXX.C.1 shall be deemed compliance with A.A.C. R18-2-1101.A.12.

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



ATTACHMENT "C": EQUIPMENT LIST

EQUIPMENT TYPE	MAX. CAPACITY	MAKE	MODEL	SERIAL NUMBER	INSTALLATION/ MFG. DATE	EQUIPMENT ID NUMBER	A.A.C. / NSPS / NESHAP
Solvent Extraction and Elec	ctrowinning						
SX Mixer Settler Train A (3 mixer/settler units)	5,177 ft ² (surface area)	In House Fabricated	In House Fabricated	N/A	1990	SX-1	A.A.C. R18-2-730
SX Mixer Settler Train B (3 mixer/settler units)	5,299 ft ² (surface area)	In House Fabricated	In House Fabricated	N/A	1990	SX-2	A.A.C. R18-2-730
SX Organic Recovery Sump Tank	725 ft ² (surface area)	In House Fabricated	In House Fabricated	N/A	1990	CST-1	A.A.C. R18-2-730
Electrowinning Cell Block 1 (56 cells)	1,628 ft ² (surface area)	N/A	N/A	N/A	N/A	EW-1	A.A.C. R18-2-730
Electrowinning Cell Block 2 (32 cells)	1,560 ft ² (surface area)	N/A	N/A	N/A	N/A	EW-2	A.A.C. R18-2-730
PLS/Draindown Pond Evaporators	45 gal/min	SMI	420F	N/A	2016	EVAP-1 through EVAP-6	A.A.C. R18-2-730
Gunnison Pond Evaporators	174 gal/min	SMI	Mega PoleCat	N/A	2018	EVAP-7 through EVAP-9	A.A.C. R18-2-730
Heap Leach Evaporative Spray Nozzles	5.6 gal/min	Senninger	N/A	N/A	2016	HEAP-EVAP	A.A.C. R18-2-730
Auxiliary Operations and E	Equipment						
Electrolyte Heater	8.3 MMBtu/hr	N/A	N/A	N/A	N/A	HTR-5	A.A.C. R18-2-724
Electrolyte Heater	8.3 MMBtu/hr	N/A	N/A	N/A	N/A	HTR-6	A.A.C. R18-2-724
Unleaded Gasoline Storage Tank	1,000 gallons	Advance Pacific	1000 double wall UR rated 142 tanks	N/A	2006	Unleaded 1	A.A.C. R18-2-710
Heap Leach Evaporative Spray Nozzles	2.61 gal/min	BETE	TF8M	N/A	N/A	Various	A.A.C. R18-2-730
Primary Crushing and Scre	eening						



EQUIPMENT TYPE	MAX. CAPACITY	MAKE	MODEL	SERIAL NUMBER	INSTALLATION/ MFG. DATE	EQUIPMENT ID NUMBER	A.A.C. / NSPS / NESHAP
Mobile Crusher	527 tph	TBD	TBD	TBD	TBD	CR-01	NSPS Subpart LL
Mobile Screen	527 tph	TBD	TBD	TBD	TBD	SC-01	NSPS Subpart LL
Storage Tanks							
Plant Sulfuric Acid Tank	338,309 gal	N/A	N/A	N/A	TBD	TNK-01	A.A.C. R18-2-730
Plant Sulfuric Acid Tank	338,309 gal	N/A	N/A	N/A	TBD	TNK-02	A.A.C. R18-2-730
Plant Sulfuric Acid Tank	338,309 gal	N/A	N/A	N/A	TBD	TNK-03	A.A.C. R18-2-730
Crusher Acid Tank	100,000 gal	N/A	N/A	N/A	TBD	TNK-04	A.A.C. R18-2-730
Strong Electrolyte Storage Tank	6,785 gal	N/A	N/A	N/A	TBD	TNK-05	A.A.C. R18-2-730
Tank House Feed Storage Tank	16,000 gal	N/A	N/A	N/A	TBD	TNK-06	A.A.C. R18-2-730
Barren Electrolyte Storage Tank	16,000 gal	N/A	N/A	N/A	TBD	TNK-07	A.A.C. R18-2-730
Kerosene (Diluent) Tank	13,000 gal	N/A	N/A	N/A	TBD	TNK-08	A.A.C. R18-2-730
Loaded Organic Tank	33,000 gal	N/A	N/A	N/A	TBD	TNK-09	A.A.C. R18-2-730
Cone Bottom Tank on Legs in Organic Recovery Area	7,600 gal	N/A	N/A	N/A	TBD	TNK-10	A.A.C. R18-2-730
Settler Type Storage Tank in Organic Recovery Area	22,800 gal	N/A	N/A	N/A	TBD	TNK-11	A.A.C. R18-2-730
Electrolyte Filter Tank 1	2,650 gal	N/A	N/A	N/A	TBD	TNK-12	A.A.C. R18-2-730
Electrolyte Filter Tank 2	2,650 gal	N/A	N/A	N/A	TBD	TNK-13	A.A.C. R18-2-730
Electrolyte Filter Tank 3	2,650 gal	N/A	N/A	N/A	TBD	TNK-14	A.A.C. R18-2-730

^{*} N/A – Not Applicable. *TBD – To Be Determined.