

**DRAFT PERMIT** 

#### PERMIT #67001 PLACE ID #135845

PERMITTEE:Rosemont Copper CompanyFACILITY:Rosemont Copper ProjectPERMIT TYPEClass II Air Quality PermitDATE ISSUED:EXPIRY DATE:

#### SUMMARY

This Class II synthetic minor permit is issued to Rosemont Copper Company, the Permittee, for the construction and operation of the Rosemont Copper Project. The facility is located at 21900 S Sonoita Highway, Vail, Arizona 85641, which is approximately 30 miles southeast of Tucson, west of State Highway 83, in Pima County, Arizona. This is a renewal of Permit #55223.

The facility is accepting voluntary emissions limitations to stay below major source thresholds. Consequently, a Class II synthetic minor permit is being processed for this facility.

Pursuant to ARS 49-402, the Arizona Department of Environmental Quality (ADEQ) asserted jurisdiction as the air quality permitting authority for the Rosemont Project. This permit is issued in accordance with Arizona Revised Statutes (ARS) 49-426. It contains requirements from Title 18, Chapter 2 of the A.A.C. and Title 40 of the Code of Federal Regulations. 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 Code of Federal Regulations (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.A.C. R18-2-306.A.8.a and b]

- 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, Pima County 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.
- **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.

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

[A.A.C. R18-2-306.A.8.c, -321.A.1.c- d, and -321.A.2]

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



## IV. POSTING OF PERMIT

- **A.** The Permittee shall post this permit, or a certificate of permit issuance, on location where the equipment is installed in such a manner as to be clearly visible and accessible. All equipment covered by this permit shall be clearly marked with one of the following:
  - 1. Current permit number; or
  - 2. Serial number or other equipment ID number that is also listed in the permit to identify that piece of equipment.
- **B.** A copy of the complete permit shall be kept on site.

## V. FEE PAYMENT

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

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

## VI. ANNUAL EMISSION INVENTORY QUESTIONNAIRE

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

- **A.** The Permittee shall complete and submit to the Director an annual emissions inventory questionnaire. The questionnaire is due by March 31<sup>st</sup> 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.
- **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.

#### VII. COMPLIANCE CERTIFICATION

[A.A.C. R18-2-309.2.a, -309.2.c-d, and -309.5.d]

- A. The Permittee shall submit a compliance certification to the Director semiannually which describes the compliance status of the source with respect to each permit condition. The first certification shall be submitted no later than May 15<sup>th</sup>, and shall report the compliance status of the source during the period between October 1<sup>st</sup> of the previous year and March 31<sup>st</sup> of the current year. The second certification shall be submitted no later than November 15<sup>th</sup>, and shall report the compliance status of the source during the period between April 1<sup>st</sup> and September 30<sup>th</sup> of the current year.
- **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;
  - 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;
  - 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. The certifications shall identify each deviation and take it into account in the compliance certification;

- 4. All instances of deviations from permit requirements reported pursuant to Condition XII.B; and
- 5. Other facts the Director may require determining the compliance status of the source.
- **C.** A progress report on all outstanding compliance schedules shall be submitted every six months beginning six months after permit issuance.

## VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS

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

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.

#### IX. INSPECTION AND ENTRY

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

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;
- **B.** Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
- **C.** Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
- **D.** Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
- **E.** Record any inspection by use of written, electronic, magnetic and photographic media.

# X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD

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

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.

#### 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.

#### XII. EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCY REPORTING

A. Excess Emissions Reporting

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

- 1. Excess emissions shall be reported as follows:
  - a. The Permittee shall report to the Director any emissions in excess of the limits established by this permit. Such report shall be in two parts as specified below:
    - (1) Notification by telephone or facsimile within 24 hours of the time when the Permittee first learned of the occurrence of excess emissions, including all available information from Condition XII.A.1.b.
    - (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).
  - b. The report shall contain the following information:
    - (1) Identity of each stack or other emission point where the excess emissions occurred;
    - (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;
    - (3) Date, time and duration, or expected duration, of the excess emissions;
    - (4) Identity of the equipment from which the excess emissions emanated;
    - (5) Nature and cause of the emissions;
    - (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;
    - (7) Steps that were or are being taken to limit the excess emissions; and
    - (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.



- 2. In the case of continuous or recurring excess emissions, the notification requirements of this section 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.
- **B.** Permit Deviations Reporting

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

The Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. 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 A.A.C. R18-2-310.01.A is prompt for deviations that constitute excess emissions;
- 2. Notice regarding upset conditions, which are defined as malfunctions or breakdowns of pollution control equipment, continuous emissions monitoring systems (CEMS), or continuous opacity monitoring systems (COMS) that are submitted within two working days of discovery, shall be considered prompt; and
- 3. Except as provided in Condition XII.B.1 and 2, prompt notification of all other types of deviations shall be every 6-months, concurrent with the semi-annual compliance certifications required in Condition VII, and can be submitted on the annual/semiannual deviation monitoring report form located on the Arizona Department of Environmental Quality Website.
- **C.** Emergency Provision

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

- 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.
- 2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if Condition XII.C.3 is met.
- 3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:



- a. An emergency occurred and that the Permittee can identify the cause(s) of the emergency;
- b. At the time of the emergency, the permitted facility was being properly operated;
- 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
- 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.
- 4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
- **D.** Compliance Schedule

[ARS § 49-426.I.5]

For any excess emission or permit deviation that cannot be corrected within 72 hours, the Permittee is required to submit a compliance schedule to the Director within 21 days of such occurrence. The compliance schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with the permit terms or conditions that have been violated.

- E. Affirmative Defenses for Excess Emissions Due to Malfunctions, Startup, and Shutdown [A.A.C. R18-2-310]
  - 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;
- b. Promulgated pursuant to Titles IV or VI of the Clean Air Act;
- c. Contained in any Prevention of Significant Deterioration (PSD) or New Source Review (NSR) permit issued by the U.S. EPA;
- d. Contained in A.A.C. R18-2-715.F; or
- e. Included in a permit to meet the requirements of A.A.C. R18-2-406.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. 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;
- 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;
- 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;
- 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;
- e. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
- f. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
- 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;
- 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;
- i. All emissions monitoring systems were kept in operation if at all practicable; and
- j. The Permittee's actions, in response to the excess emissions, were documented by contemporaneous records.
- 3. Affirmative Defense for Startup and Shutdown
  - a. Except as provided in Condition XII.E.3.b, 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:

- (1) The excess emissions could not have been prevented through careful and prudent planning and design;
- (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;
- (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;
- (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;
- (5) All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
- (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;
- (7) All emissions monitoring systems were kept in operation if at all practicable; and
- (8) Contemporaneous records documented the Permittee's actions in response to the excess emissions.
- 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.E.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.E.2.

5. Demonstration of Reasonable and Practicable Measures

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

#### XIII. RECORDKEEPING REQUIREMENTS

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

- **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;
  - 2. The date(s) analyses were performed;
  - 3. The name of the company or entity that performed the analyses;
  - 4. A description of the analytical techniques or methods used;
  - 5. The results of such analyses; and
  - 6. The operating conditions as existing at the time of sampling or measurement.
- **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.

#### 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 Section VII.
- **B.** Excess emission; permit deviation, and emergency reports in accordance with Section XII.
- **C.** Other reports required by any condition of Attachment "B".

#### XV. DUTY TO PROVIDE INFORMATION

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

- **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.
- **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. PERMIT AMENDMENT OR REVISION

[A.A.C. R18-2-317.01, -318, -319, and -320]

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, as follows:

- A. Facility Changes that Require a Permit Revision Class II (A.A.C. R18-2-317.01);
- **B.** Administrative Permit Amendment (A.A.C. R18-2-318);
- C. Minor Permit Revision (A.A.C. R18-2-319); and
- **D.** Significant Permit Revision (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.A.C. R18-2-306.A.4 and -317.02]

- A. Except for a physical change or change in the method of operation at a Class II source requiring a permit revision under A.A.C. R18-2-317.01, or a change subject to logging or notice requirements in Conditions XVII.B and XVII.C, a change at a Class II source shall not be subject to revision, notice, or logging requirements under this Section.
- **B.** Except as otherwise provided in the conditions applicable to an emissions cap created under A.A.C. R18-2-306.02, the following changes may be made if the source keeps on site records of the changes according to Appendix 3 of the Arizona Administrative Code:
  - 1. Implementing an alternative operating scenario, including raw materials changes;
  - 2. Changing process equipment, operating procedures, or making any other physical change if the permit requires the change to be logged;
  - 3. Engaging in any new insignificant activity listed in A.A.C. R18-2-101.68 but not listed in the permit;
  - 4. Replacing an item of air pollution control equipment listed in the permit with an identical (same model, different serial number) item. The Director may require verification of efficiency of the new equipment by performance tests; and
  - 5. A change that results in a decrease in actual emissions if the source wants to claim credit for the decrease in determining whether the source has a net emissions increase for any purpose. The logged information shall include a description of the change that will produce the decrease in actual emissions. A decrease that has not been logged is creditable only if the decrease is quantifiable, enforceable, and otherwise qualifies as a creditable decrease.
- **C.** Except as provided in the conditions applicable to an emissions cap created under A.A.C. R18-2-306.02, the following changes may be made if the source provides written notice to the Department in advance of the change as provided below:



- 1. Replacing an item of air pollution control equipment listed in the permit with one that is not identical but that is substantially similar and has the same or better pollutant removal efficiency: 7 days. The Director may require verification of efficiency of the new equipment by performance tests;
- 2. A physical change or change in the method of operation that increases actual emissions more than 10% of the major source threshold for any conventional pollutant but does not require a permit revision: 7 days;
- 3. Replacing an item of air pollution control equipment listed in the permit with one that is not substantially similar but that has the same or better efficiency: 30 days. The Director may require verification of efficiency of the new equipment by performance tests;
- 4. A change that would trigger an applicable requirement that already exists in the permit: 30 days unless otherwise required by the applicable requirement;
- 5. A change that amounts to reconstruction of the source or an affected facility: 7 days. For the purposes of this subsection, reconstruction of a source or an affected facility shall be presumed if the fixed capital cost of the new components exceeds 50% of the fixed capital cost of a comparable entirely new source or affected facility and the changes to the components have occurred over the 12 consecutive months beginning with commencement of construction; and
- 6. A change that will result in the emissions of a new regulated air pollutant above an applicable regulatory threshold but that does not trigger a new applicable requirement for that source category: 30 days. For purposes of this requirement, an applicable regulatory threshold for a conventional air pollutant shall be 10% of the applicable major source threshold for that pollutant.
- **D.** For each change under Condition XVII.C, the written notice shall be by certified mail or hand delivery and shall be received by the Director the minimum amount of time in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided with less than required notice, but must be provided as far in advance of the change, or if advance notification is not practicable, as soon after the change as possible. The written notice shall include:
  - 1. When the proposed change will occur;
  - 2. A description of the change;
  - 3. Any change in emissions of regulated air pollutants; and
  - 4. Any permit term or condition that is no longer applicable as a result of the change.
- **E.** A source may implement any change in Condition XVII.C without the required notice by applying for a minor permit revision under A.A.C. R18-2-319.
- **F.** The permit shield described in A.A.C. R18-2-325 shall not apply to any change made under this Section, other than implementation of an alternate operating scenario under Condition XVII.B.1.



- **G.** Notwithstanding any other part of this Section, the Director may require a permit to be revised for any change that, when considered together with any other changes submitted by the same source under this Section over the term of the permit, constitutes a change under subsection A.A.C. R18-2-317.01.A.
- **H.** If a source change is described under both Conditions XVII.B and C, the source shall comply with Condition XVII.C. If a source change is described under both Condition XVII.C and A.A.C. R18-2-317.01.B, the source shall comply with A.A.C. R18-2-317.01.B.
- **I.** A copy of all logs required under Condition XVII.B shall be filed with the Director within 30 days after each anniversary of the permit issuance date. If no changes were made at the source requiring logging, a statement to that effect shall be filed instead.
- J. Logging Requirements

[Arizona Administrative Code, Appendix 3]

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

#### XVIII. TESTING REQUIREMENTS

[A.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 Testing

Tests shall be conducted during operation at the maximum possible capacity of each unit under representative operational conditions unless other conditions are required by the



applicable test method or in this permit. With prior written approval from the Director, testing may be performed at a lower rate. Operations during periods of start-up, shutdown, and malfunction (as defined in A.A.C. R18-2-101) shall not constitute representative operational conditions unless otherwise specified in the applicable standard.

- **C.** 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.
- **D.** Test Plan

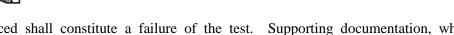
At least 14 calendar days prior to performing a test, the Permittee shall submit a test plan to the Director in accordance with A.A.C. R18-2-312.B and the Arizona Testing Manual. This test plan must include the following:

- 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:

- 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.

#### **G.** Report of Final Test Results

A written report of the results of all performance tests shall be submitted to the Director within 30 days after the test is performed. The report shall be submitted in accordance with the Arizona Testing Manual and A.A.C. R18-2-312.A.

#### XIX. PROPERTY RIGHTS

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

#### 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.

#### 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 (Attachment "A") and any facility changes without a permit revision pursuant to Section XVII of this Attachment (Attachment "A").

#### XXII. PROTECTION OF STRATOSPHERIC OZONE

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

#### XXIII. APPLICABILITY OF NSPS/NESHAP GENERAL PROVISIONS

[40 CFR Part 60 and Part 63]

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.



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

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

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

[40 CFR Part 82]



## **ATTACHMENT "B": SPECIFIC CONDITIONS**

#### I. RELATIONSHIP OF PERMIT TO APPLICABLE STATE IMPLEMENTATION PLAN

This permit is issued pursuant to the provisions of the Arizona Revised Statutes (ARS) and constitutes an installation permit for the purpose of the applicable State Implementation Plan. [ARS § 49-404.c and -426]

Where a condition of this permit refers to the "property line," it shall mean the perimeter fence line that excludes the public established in Attachment "B", Condition XIII.

#### II. 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 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 EPA Reference Method 9.

- 2. Operating Limitations
  - a. The Permittee shall comply with the approved Visual Observation Plan. The observation plan shall identify a central lookout station or multiple observation points, as appropriate, from where the visible emission sources shall be monitored. When multiple observation points are used, all the visible emission sources associated with each observation point shall be specifically identified within the observation plan.

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

b. The Permittee shall operate and maintain all equipment identified in Attachment "C" in accordance with vendor-supplied operations and maintenance instructions. If vendor-supplied operations and maintenance instructions are not available or not applicable, the Permittee shall prepare an Operation and Maintenance Plan (O&M) at least 90 days prior to the start-up of operations, which provides adequate information to properly operate and maintain the equipment. The Permittee shall operate the equipment in accordance with the O&M plan.

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

c. The Permittee shall perform comprehensive preventative maintenance checks according to vendor-supplied O&M instructions or the facility's O&M plan on all dust control equipment used at the facility. These maintenance checks shall be conducted at least annually.

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



d. Nothing in this Attachment (Attachment "B") shall be so construed as to prevent the utilization of measurements from emissions monitoring devices or techniques not designated as performance tests as evidence of compliance with applicable good maintenance and operating requirements.

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

e. The Permittee shall comply with the dust control plan included in Attachment "D" of this permit to control particulate matter emissions from activities identified in the dust control plan. The Permittee may implement proposed changes to the dust control plan upon submission to the Director if necessary to further minimize fugitive dust. Nothing in this permit prohibits the Permittee from implementing additional dust control measures not set forth in the dust control plan.

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

f. <u>The Permittee shall limit the amount of rock mined (waste rock and ore combined) to no more than 420,000 tons per day as calculated on a calendar day basis.</u>

[A.A.C. R18-2-306.A.2 and -331.A.3.a] [Material Permit Conditions are indicated by underline and italics]

- g. <u>The Permittee shall limit the amount of Ammonium Nitrate and Fuel Oil</u> (ANFO) used during blasting to no more than 250 tons per day. [A.A.C. R18-2-306.A.2 and -331.A.3.a] [Material Permit Conditions are indicated by underline and italics]
- h. The Permittee shall not cause or permit emissions from malodorous matter during processing, storing, use or transporting to cross a property line between the facility and a residential, recreational, institutional, education, retail sales, hotel, or business premise without minimizing the emissions by applying good modern practices. Malodorous matter shall include but not be limited to paints, acids, alkalis, pesticides, fertilizer, and manure.

[Pima SIP Rule 344]

3. Visibility Limiting Standard

[Pima County SIP Rule 343]

- a. The Permittee shall not cause or permit the airborne diffusion of visible emissions, including fugitive dust, beyond the property boundary line within which the emissions become airborne. Within actual practice, the airborne diffusion of visible emissions across property lines shall be prevented by appropriately controlling the emissions at the point of discharge, or ceasing entirely the activity or operation which is causing or contributing to the emissions.
- b. Condition II.A.3.a shall not apply when wind speeds exceed twenty-five (25) miles per hour as estimated by a certified visible emissions evaluator using the Beaufort Scale of Wind-Speed equivalents, or as recorded by a U.S. weather Bureau Stations or a U.S. government military installation. This exception does not apply to the demolition, destruction, transport, or pulverization of structures containing friable asbestos materials, and all dust-producing activities associated with such sources shall be halted



when the wind is causing or contributing visible emissions to cross beyond the property lines within which the emissions discharge.

- c. Any disregard of, neglect of, or inattention to other controls required herein, during any time when this condition is in effect, shall automatically waive the exception and such relaxation of controls shall be a violation to the generation of airborne particulate matter from undisturbed land.
- 4. Monitoring, Recordkeeping, and Reporting Requirements
  - 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. [A.A.C. R18-2-306.A.3.c]
  - b. If the plume 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, the location of the observation and the results of the instantaneous survey.

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

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

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

- (1) If the six-minute observation of the plume 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, the location of the observation and the results of the six-minute observation.
- (2) If the six-minute observation of the plume 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 of Attachment "A".
  - (d) Conduct another six-minute observation within 48 hours to document the effectiveness of the adjustments or repairs completed.
- d. The Permittee shall keep records of dates and times when blasting is

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conducted and the amount of ANFO in tons used during each blast. The records of each day's blasting activity shall be available in a central log no later than 5:00 pm the following business day.

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

- e. The Permittee shall record the total tons of daily rock mined (including ore and waste rock). The records of each day's mined rock total shall be available in a central log no later than 5:00 pm the following business day. [A.A.C. R18-2-306.A.3.c]
- f. The Permittee shall maintain, on-site, records of the manufacturer's specifications or O&M plan for all equipment listed in Attachment "C" of this permit.

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

g. All records, analyses, and reports required by this permit shall be retained for a minimum of five years from the date of generation. The most recent two years of data shall be kept on-site. All records shall be made available for inspection by authorized Department personnel during normal working hours.

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

h. The Permittee shall conduct a daily visible emissions survey at places where the facility fugitive dust generating activities are within 300 feet of the property boundary line in accordance with Condition II.A of this Attachment (Attachment "B"). When such emissions are observed to cross the property boundary line, the Permittee shall follow the excess emissions reporting procedures in Section XII of Attachment "A" of this permit.

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

At the time the compliance certifications required by Section VII of Attachment "A" are submitted, the Permittee shall submit summary reports of all monitoring activities required by this Attachment performed in the same six month period as applied to the compliance certification period. The summary report shall identify each monitoring activity, state whether monitoring was conducted as required by the permit, list any deviations with dates, nature of the deviation and any explanation and/or corrective action, and identify any exceedances to excursions of relevant standards.

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

j. The Permittee shall notify the Director in writing within 30 days of purchase of the equipment listed in Attachment "C". Equipment purchases within a specified period may be grouped and reported together. This notification shall contain all the information required to complete Attachment "C".

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

### III. METALLIC MINERAL PROCESSING EQUIPMENT SUBJECT TO NEW SOURCE PERFORMANCE STANDARDS (NSPS) SUBPART LL

**A.** Applicability

i.



This Section is applicable to equipment identified in Attachment "C" as subject to New Source Performance Standards (NSPS), 40 CFR 60 Subpart LL ("Subpart LL").

**B.** Notification Requirements

The Permittee shall furnish to the Director written notification as follows:

1. A notification of the date of construction of an affected facility is commenced postmarked no later than 30 days after such date. This condition is satisfied by the notice given pursuant to Condition II.A.4.j above.

[40 CFR 60.7(a)(1)]

2. A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

[40 CFR 60.7(a)(3)]

3. A notification of the anticipated date for conducting the opacity observations required by 40 CFR 60.11(e)(1). The notification shall also include, if appropriate, a request for the Director to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date.

[40 CFR 60.7(a)(6)]

#### **C.** Operating Requirements

At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate any affected facility 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)]

#### **D.** Particulate Matter

1.

Emission Limitations

- a. On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, the Permittee shall not cause to be discharged into the atmosphere from equipment subject to this Section but not identified under Table 1, any stack emissions that contain particulate matter in excess of 0.05 grams per dry standard cubic meter. [40 CFR 60.382(a)(1)]
- b. <u>On and after the date on which the performance test required to be</u> <u>conducted by 40 CFR 60.8 is completed, the Permittee shall not cause to</u> <u>be discharged into the atmosphere from the control devices any emissions</u> <u>which contain particulate matter less than 10 microns (PM<sub>10</sub>) in excess of</u> <u>the limits identified in the table below corresponding to each control</u> <u>device:</u>



# Table 1: Emission Limits

Emission Unit ID	Emission Points Controlled	PM10 Emissions Limit
<u>AE-001</u>	<ul> <li><u>Process Equipment</u> <ul> <li><u>Primary Crusher</u></li> <li><u>Material Handling Emission Points:</u></li> <li><u>Crusher to Crusher Vault</u></li> <li><u>Crusher Vault to Crusher Discharge Feeder</u></li> <li><u>Crusher Discharge Feeder to Stockpile Feed Conveyor</u></li> </ul> </li> </ul>	<u>0.0023 gr/dscf</u>
<u>AE-002</u>	<u>Material Handling Emission Points:</u> <u>Stockpile Feed Conveyor to Coarse Ore Stockpile</u>	<u>0.0024 gr/dscf</u>
<u>AE-003</u>	<ul> <li><u>Process Equipment:</u> <ul> <li><u>Pebble Crusher #1</u></li> </ul> </li> <li><u>Material Handling Emission Point:</u> <ul> <li><u>Coarse Ore Stockpile to Reclaim Feeders</u></li> <li><u>Reclaim Feeder to Sag Mill Conveyors</u></li> <li><u>Pebble Crusher Bin #1 to Pebble Crusher Feeder #1</u></li> <li><u>Pebble Crusher Feeder #1 to Pebble Crusher #1</u></li> <li><u>Pebble Crusher #1 to Pebble Crusher Product Conveyor #1</u></li> <li><u>Pebble Crusher Product Conveyor #1 to SAG Mill Feed</u></li> <li><u>Conveyor #1</u></li> </ul> </li> </ul>	<u>0.0017 gr/dscf</u>
<u>AE-004</u>	<ul> <li><u>Process Equipment:</u> <ul> <li><u>Pebble Crusher #2</u></li> </ul> </li> <li><u>Material Handling Emission Points:</u> <ul> <li><u>Coarse Ore Stockpile to Reclaim Feeders</u></li> <li><u>Reclaim Feeder to Sag Mill Conveyors</u></li> <li><u>Pebble Crusher Bin #2 to Pebble Crusher Feeder #2</u></li> <li><u>Pebble Crusher Feeder #2 to Pebble Crusher #2</u></li> <li><u>Pebble Crusher #2 to Pebble Crusher #2</u></li> <li><u>Pebble Crusher #2 to Pebble Crusher Product Conveyor #2</u></li> <li><u>Pebble Crusher Product Conveyor #2 to SAG Mill Feed Conveyor #2</u></li> </ul> </li> </ul>	<u>0.0017 gr/dscf</u>
<u>AE-005</u>	<ul> <li><u>Process Equipment</u></li> <li><u>Copper Concentrate Filters</u></li> <li><u>Material Handling Emission Points:</u></li> <li><u>Copper Concentrate Loadout Stockpile to Shipment Truck</u></li> <li><u>via Front End Loader</u></li> </ul>	<u>0.002 gr/dscf</u>
<u>AE-009</u>	Material Handling Emission Points:• Transfer of Quicklime to Quicklime Storage Bin	<u>0.002 gr/dscf</u>
<u>AE-011</u>	Material Handling Emission Points:           • Molybdenum Concentrate Bin to Molybdenum Concentrate	<u>0.002 gr/dscf</u>



	<u>Bag Feeder</u> • <u>Molybdenum Concentrate Bag Feed to Molybdenum</u> <u>Concentrate Bag Loader</u>	
<u>AE-012</u>	<u>Material Handling Emission Points:</u> • <u>Molybdenum Concentrate Dryer to Molybdenum</u> <u>Concentrate Bin</u>	<u>0.002 gr/dscf</u>
<u>AE-013</u>	<u>Process Equipment:</u> <u>Molybdenum Concentrate Dryer</u>	<u>0.012 gr/dscf</u>
<u>AE-014</u>	Material Handling Emission Points:• Transfer of Flocculant from Supersacks to Flocculant FeedBin	<u>0.009 gr/dscf</u>
<u>AE-015</u>	<u>Process Equipment:</u> • <u>Quicklime Slaking Mill</u> <u>Material Handling Emission Points:</u> • <u>Lime Slaking Discharge Chute</u>	<u>0.02 gr/dscf</u>

# 2. Air Pollution Control Requirements

The Permittee shall install the following control equipment prior to start-up of the corresponding process unit(s) and shall operate it at all times when any of the corresponding process unit(s) are in operation.

- a. <u>The Permittee shall install, operate</u> and maintain <u>cartridge filter dust</u> <u>collector (AE-001) to control particulate matter emissions from the</u> <u>following sources:</u>
  - (1) <u>Primary Crusher;</u>
  - (2) <u>Material Transfer from Crusher to Crusher Vault;</u>
  - (3) <u>Material Transfer from Crusher Vault to Crusher Discharge</u> <u>Feeder;</u>
  - (4) <u>Material Transfer from Crusher Discharge Feeder to Stockpile</u> <u>Feed Conveyor.</u> [Pima SIP Rule 316.A, A.A.C. R18-2-306.01 and -331.A.3.d and e]

[Material Permit Conditions are indicated by underline and italics]

- b. <u>The Permittee shall install, operate</u> and maintain <u>cartridge filter dust</u> <u>collector (AE-002) to control particulate matter emissions from the</u> <u>following source:</u>
  - (1) <u>Stockpile Feed Conveyor to Covered Coarse Ore Stockpile;</u> [Pima SIP Rule 316.A, A.A.C. R18-2-306.01 and -331.A.3.d and e] [Material Permit Conditions are indicated by underline and italics]
- c. <u>The Permittee shall install, operate</u> and maintain <u>cartridge filter dust</u> <u>collectors (AE-003 and AE-004) to control particulate matter emissions</u> <u>from the following sources:</u>



e.

- (1) <u>Pebble Crusher #1 and 2;</u>
- (2) <u>Material Transfer from Coarse Ore Stockpile to Reclaim Feeders;</u>
- (3) <u>Material Transfer from Reclaim Feeder to Sag Mill Conveyors;</u>
- (4) <u>Material Transfer from Pebble Crusher Bins to Pebble Crusher</u> <u>Feeders;</u>
- (5) <u>Material Transfer from Pebble Crusher Feeder to Pebble</u> <u>Crushers;</u>
- (6) <u>Material Transfer from Pebble Crushers to Pebble Crusher</u> <u>Product Conveyors;</u>
- (7) <u>Material Transfers from Pebble Crusher Product Conveyors to</u> <u>SAG Mill Feed Conveyors.</u>
   [Pima SIP Rule 316.A, A.A.C. R18-2-306.01 and -331.A.3.d and e] [Material Permit Conditions are indicated by underline and italics]
- d. <u>The Permittee shall install, operate</u> and maintain <u>cartridge filter dust</u> <u>collector (AE-005) to control particulate matter emissions from the</u> <u>following sources:</u>
  - (1) <u>Copper Concentrate Filters;</u>
  - (2) <u>Material Transfer from Copper Concentrate Loadout Stockpile to</u> <u>Shipment Truck via Front End Loader.</u> [Pima SIP Rule 316.A, A.A.C. R18-2-306.01 and -331.A.3.d and e] [Material Permit Conditions are indicated by underline and italics]
  - <u>The Permittee shall install, operate</u> and maintain <u>cartridge filter dust</u> <u>collectors (AE-009) to control particulate matter emissions from the</u> <u>following source:</u>
    - (1) <u>Material Transfer of Quicklime to the Quicklime Storage Bin.</u> [Pina SIP Rule 316.A, A.A.C. R18-2-306.01 and -331.A.3.d and e] [Material Permit Conditions are indicated by underline and italics]
- f. <u>The Permittee shall install, operate</u> and maintain <u>cartridge filter dust</u> <u>collectors (AE-011) to control particulate matter emissions from the</u> <u>following sources:</u>
  - (1) <u>Material Transfer from Molybdenum Concentrate Bin to</u> <u>Molybdenum Concentrate Bag Feeder;</u>
  - (2) <u>Material Transfer from Molybdenum Concentrate Bag Feed to</u> <u>Molybdenum Concentrate Bag Loader.</u>

[Pima SIP Rule 316.A, A.A.C. R18-2-306.01 and -331.A.3.d and e] [Material Permit Conditions are indicated by underline and italics]

g. <u>The Permittee shall install, operate</u> and maintain<u>cartridge filter dust</u> <u>collectors (AE-012) to control particulate matter emissions from the</u>



following source:

- (1) <u>Material Transfer from Molybdenum Concentrate Dryer to</u> <u>Molybdenum Concentrate Bin.</u> [Pima SIP Rule 316.A, A.A.C. R18-2-306.01 and -331.A.3.d and e] [Material Permit Conditions are indicated by underline and italics]
- h. <u>The Permittee shall install, operate</u> and maintain <u>a scrubber (AE-013) to</u> <u>control particulate matter emissions from the Molybdenum Concentrate</u> <u>Dryer.</u>

[Pima SIP Rule 316.A, A.A.C. R18-2-306.01 and -331.A.3.d and e] [Material Permit Conditions are indicated by underline and italics]

- i. <u>The Permittee shall install, operate</u> and maintain <u>cartridge filter dust</u> <u>collector (AE-014) to control particulate matter emissions during material</u> <u>transfer from:</u>
  - (1) <u>Transfer of Flocculant from Superstacks to Flocculant Feed Bin</u> [Pima SIP Rule 316.A, A.A.C. R18-2-306.01 and -331.A.3.d and e] [Material Permit Conditions are indicated by underline and italics]
- j. <u>The Permittee shall install, operate</u> and maintain <u>a scrubber (AE-015) to</u> <u>control particulate matter emissions from the following sources:</u>
  - (1) *Quicklime Slaking Mill; and*
  - (2) <u>Lime Slaking Discharge Chute.</u> [Pima SIP Rule 316.A, A.A.C. R18-2-306.01 and -331.A.3.d and e] [Material Permit Conditions are indicated by underline and italics]
- k.

1.

The material that is fine enough to contribute to  $PM_{10}$  emissions that accumulates around process equipment shall be minimized. At points where such material does accumulate, it shall be collected and removed either manually or by using a vacuum equipped truck as expeditiously as practicable. Clean-up shall be performed on an as-needed basis.

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

<u>The Permittee shall install, operate</u> and maintain <u>water sprays when</u> <u>unloading ore to the Primary Crusher Dump Hopper from Haul Trucks or</u> <u>the Run of Mine Stockpile to control particulate matter emissions.</u>

[Pima SIP Rule 316.A, A.A.C. R18-2-306.01 and -331.A.3.d and e] [Material Permit Conditions are indicated by underline and italics]

m. <u>The Permittee shall install chutes at the conveyor-to-conveyor transfer</u> points to minimize particulate emissions.

[Pima SIP Rule 316.A, A.A.C. R18-2-306.A.2 and -331.A.3.d] [Material Permit Conditions are indicated by underline and italics]

n. <u>The Permittee shall install rubber sealing strips and rubber curtains on</u> <u>all material transfer associated with the affected facilities to minimize</u> <u>fugitive emissions.</u>

> [Pima SIP Rule 316.A, A.A.C. R18-2-306.01 and -331.A.3.d] [Material Permit Conditions are indicated by underline and italics]



- 3. Monitoring, Recordkeeping, and Reporting Requirements
  - a. <u>The Permittee shall install, calibrate,</u> maintain, and operate <u>a monitoring</u> device for the continuous measurement of the change in pressure of the gas stream through the operating scrubber (AE-013). The monitoring device must be certified by the manufacturer to be accurate within ±250 pascals (± 1 inch water) gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions.

[40 CFR 60.384(a) and A.A.C. R18-2-331.A.3.c] [Material Permit Conditions are indicated by underline and italics]

b. <u>The Permittee shall install, calibrate</u>, maintain, and operate <u>a monitoring</u> <u>device for the continuous measurement of the scrubbing liquid flow rate</u> <u>to the operating scrubber (AE-013). The monitoring device must be</u> <u>certified by the manufacturer to be accurate within ±5 percent of design</u> <u>scrubbing liquid flow rate and must be calibrated on at least an annual</u> <u>basis in accordance with manufacturer's instructions.</u> [40 CFR 60.384(b) and A.A.C. R18-2-331.A.3.c]

[Material Permit Conditions are indicated by underline and italics]

c. The Permittee shall record on a weekly basis the measurements of both the change in pressure of the gas stream across the operating scrubber and the scrubbing liquid flow rate.

[40 CFR 60.385(b)]

d. The Permittee shall submit semi-annual reports of occurrences when the measurements of the scrubber pressure loss (or gain) or liquid flow rate differ by more than  $\pm 30$  percent from the average obtained during the most recent performance test. These reports shall be postmarked within 30 days following the end of the second and fourth calendar quarters.

[40 CFR 60.385(c) and (d)]

The Permittee shall use the monitoring devices required by Conditions III.D.3.a and b to determine the pressure loss of the gas stream through the scrubber (AE-013) and the scrubber (AE-013) liquid flow rate at any time during each particulate matter performance test run and the average of the three determinations shall be computed.

[40 CFR 60.386(c)]

f. The Permittee shall continuously measure and record the electrostatic precipitator primary and secondary voltage and current and either alarm them or check once per shift. If an excursion from the manufacture's specifications is detected, the Permittee shall commence corrective action no later than the following shift to return the unit to proper operation. Proper operation shall be restored as expeditiously as practicable.

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

4. Testing Requirements

e.

a. Within 60 days of achieving the maximum production rate at the facility, but no later than 180 days after initial start-up, the Permittee shall conduct an initial performance test for emissions of particulate matter from the stacks of the control equipment. Subsequent tests shall be performed



annually.

[40 CFR 60.8(a) and 60.386(a)]

b. EPA Reference Method 5, 17 or 201A shall be used to determine the concentration of particulate matter emissions from the control equipment stacks as specified in 40 CFR 51, Appendix M. Unless using Method 201A, all particulate matter measurements using Method 5 shall be considered to have an aerodynamic diameter less than 10 microns. The performance test shall be used to demonstrate compliance with the voluntarily accepted limits. The sampling volume for each run shall be at least 1.7 dscm (60 dscf). The sampling probe and filter holder of Method 5 may be operated without heaters if the gas stream being sampled is at ambient temperature. For gas streams above ambient temperature, the Method 5 sampling train shall be operated with a probe and filter temperature slightly above the effluent temperature (up to a maximum filter temperature of 121°C (250°F) in order to prevent water condensation on the filter.

[40 CFR 60.386(b)(1)]

5. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with Pima SIP Rule 316.A, 40 CFR 60.382(a)(1), 60.386(a), and 60.386(b)(1). [A.A.C. R18-2-325]

- E. Opacity
  - 1. Emission Limitations
    - a. On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, the Permittee shall not cause to be discharged into the atmosphere from equipment subject to this Section, any stack emissions that exhibit greater than 7 percent opacity, unless the stack emissions are discharged from unit using a wet scrubbing emission control device (AE-013).

[Pima SIP Rule 321, 40 CFR 60.382(a)(2), A.A.C. R18-2-331A.3.f] [Material Permit Conditions are indicated by underline and italics]

b. On or after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated but not later than 180 days after initial startup, *the Permittee shall not cause to be discharged into the atmosphere from an affected facility subject to NSPS Subpart LL any process fugitive emissions that exhibit greater than 10 percent opacity.* [Pima SIP Rule 321, 40 CFR 60.382(b) and A.A.C. R18-2-331.A.3.f]

[Material Permit Conditions are indicated by underline and italics]

- c. The opacity standards set forth in Conditions III.E.1.a & b shall apply at all times except during periods of startup, shutdown, and malfunction. [40 CFR 60.11(c)]
- d. The Permittee shall not cause, allow or permit the effluent from affected wet scrubber (NSPS applicable) AE-013 stack to have an average optical density equal to or greater than 20 percent opacity.



[Pima SIP Rule 321, PCC 17.16.040]

2. Monitoring, Reporting and Recordkeeping Requirements

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

A certified observer shall conduct a weekly visual survey of emissions from the dust collector stacks and from process fugitive emissions covered by this Section during normal operation mode. The survey shall be conducted in accordance with the methodology identified in Condition II.A of this Attachment.

- 3. Testing Requirements
  - a. For the purpose of demonstrating initial compliance with Conditions III.E.1.a and b, opacity observations shall be conducted concurrently with the initial performance test required in Condition III.D.4.a above, except as allowed in 40 CFR 60.11(e)(1). The minimum total time of observations shall be 3 hours (thirty 6-minute averages). [40 CFR 60.11(b) and 386(b)(2)]
  - b. EPA Reference Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity from stack emissions and process fugitive emissions. The observer shall read opacity only when emissions are clearly identified as emanating solely from the affected facility being observed. [40 CFR 60.386(b)(2)]
- 4. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with Pima SIP Rule 321, 40 CFR 60.382(a)(2), 60.382(b), 60.386(b)(2) and P.C.C 17.16.040.

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

#### IV. METALLIC MINERAL PROCESSING NOT SUBJECT TO NSPS SUBPART LL

A. Applicability

This Section applies to the metallic mineral processing equipment identified in Attachment "C" as subject to A.A.C. R18-2-721.

- **B.** Operational Requirements
  - 1. The Permittee shall maintain records of the daily process rate and hours of operation of all material handling equipment.

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

2. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with A.A.C. R18-2-721.F. [A.A.C. R18-2-325]

- **C.** Particulate Matter
  - 1. Emission Limitations



- 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 subject to the provisions of this Section 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 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

 $E = 3.59P^{0.62}$ 

Where:

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

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

[AZ SIP R9-3-521.A.2.a]

(2) For process sources having a 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:

 $E = 17.31P^{0.16}$ 

Where E and P are defined above.

[AZ SIP R9-3-521.A.2.b]

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.

[AZ SIP R9-3-521.A.4]

- 2. Air Pollution Control Requirements
  - a. The material that is fine enough to contribute to  $PM_{10}$  emissions that accumulates around process equipment shall be minimized. At points where such material does accumulate, it shall be collected and removed either manually or by using a vacuum equipped truck as expeditiously as practicable. Clean-up shall be performed on an as-needed basis.

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

b. <u>The Permittee shall install, operate</u> and maintain <u>water sprays to control</u> <u>particulate matter emissions from process sources.</u>

[Pima SIP Rule 316, A.A.C. R18-2-306.01 and -331.A.3.d and e] [Material Permit Conditions are indicated by underline and italics]

c. <u>The Permittee shall install chutes at the conveyor-to-conveyor transfer</u> points to minimize particulate emissions.

[Pima SIP Rule 316.A, A.A.C. R18-2-306.A.2 and -331.A.3.d and e] [Material Permit Conditions are indicated by underline and italics]



<u>The Permittee shall install, operate</u> and maintain <u>cartridge filter dust</u> <u>collectors (PC-LDC1/C2/C3) to control particulate matter emissions from</u> the metallurgical/analytical laboratory building.

> [Pima SIP Rule 316.A, A.A.C. R18-2-306.01 and -331.A.3.d and e] [Material Permit Conditions are indicated by underline and italics]

3. Permit Shield

d.

Compliance with the conditions of this Section shall be deemed compliance with Pima SIP Rule 316.A and AZ SIP R9-3-521.

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

- **D.** Opacity
  - 1. Emission Limitations
    - a. The opacity of any plume or effluent from any process source shall not be greater than 20%.

[Pima SIP Rule 321, A.A.C. R18-2-702.B.3]

- b. If the presence of uncombined water is the only reason for an exceedance of the visible emissions requirements in Condition IV.D.1.a above, the exceedance shall not constitute a violation of the applicable opacity limit. [A.A.C. R18-2-702.C]
- 2. Monitoring, Reporting and Recordkeeping Requirements

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

A certified observer shall conduct a weekly visual survey of emissions from all sources covered by this Section while they are in operation and in accordance with Condition II.A of this Attachment.

3. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with Pima SIP Rule 321, A.A.C. R18-2-702.B.3 and 702.C.

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

# V. INTERNAL COMBUSTION ENGINES (ICE)

**A.** Applicability

This Section is applicable to the generators identified as subject to New Source Performance Standards (NSPS) Subpart IIII in the equipment list in Attachment "C".

- **B.** General Requirements
  - 1. The Permittee shall not install any new stationary compression ignition internal combustion engine (CI ICE) (excluding fire pump engines) that does not meet the applicable requirements for 2007 model year engines.

[40 CFR 60.4208]

2. An emergency CI ICE shall be limited to emergency situations and required testing and maintenance only 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 (or the normal power source, if the facility runs on its own power production) is interrupted, or used to pump water in the case of fire or flood, etc. Stationary CI ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity shall not be considered to be emergency engines. Notwithstanding the foregoing, emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply nonemergency power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this condition, is prohibited.

[40 CFR 60.4219, 60.4211(f)]

3. Opacity shall not exceed 60% during cold start or loaded operation, except that up to one reading out of 26 15-second readings may be excluded in determining opacity during loaded operation, where loaded operation means accelerated under load.

[Pima SIP Rule 321]

#### **C.** Operating Requirements

1. <u>The Permittee shall not operate any emergency CI ICE for any reason other than</u> <u>emergency operation, or maintenance and testing, and in non-emergency</u> <u>situations for no more than 50 hours per year.</u>

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

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

[A.A.C.R18-2-306.A.3.C, and -331.A.3.a] [Material Permit Conditions are indicated by underline and italics]

3. The Permittee shall operate and maintain the CI ICE and the control device according to the manufacturer's written instructions, over the entire life of the engine.

[40 CFR 60.4211(a), 60.4206]

4. The Permittee shall only change those engine settings that are permitted by the manufacturer.



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[40 CFR 60.4211(a)]

5. The Permittee shall meet the applicable requirements of 40 CFR Part 89, 94 and/or 1068, as they may apply to the Permittee.

[40 CFR 60.4211(a)]

6. The Permittee may operate the stationary ICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine.

[40 CFR 60.4211(f)]

7. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The Permittee may petition the Administrator and the Director for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. The Permittee may operate the emergency stationary ICE for up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing.

[40 CFR 60.4211(f)]

8. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with Pima SIP Rule 321, 40 CFR 60.4206, 60.4211(a) and (f), and 40 CFR 63 Subpart ZZZZ.

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

#### **D.** Fuel Requirements

1.

- The Permittee shall use only diesel fuel that meets the requirements of nonroad diesel fuel listed in 40 CFR 80.510(b) and listed below:
  - 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)]

2. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with 40 CFR 60.4207(b), and 40 CFR 63 Subpart ZZZZ.

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

- **E.** Emission Limitations and Standards
  - 1. The Permittee shall comply with the emission standards listed in the corresponding applicable regulations as stated in the Table below:

[40 CFR 60.4205(a), (b), (c), and (f)]



Engine Type	Displacement (Liters per cylinder)	Applicable regulations					
Non-Fire Pump Engines	Less than 30	New Nonroad engines in 40 CFR 60.4202					
Fire Pump	Less than 30	Table 4 of 40 CFR Part 60 Subpart IIII					

#### Table 2 Emission Standards for Emergency ICE

#### 2. Permit Shield

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

Compliance with the conditions of this Section shall be deemed compliance with 40 CFR 60.4205(a), 40 CFR 60.4205(b), 40 CFR 60.4205(f), 40 CFR 60.4205(c), 40 CFR 63 Subpart ZZZZ and Pima SIP Rule 321.

- **F.** Compliance Requirements
  - 1. The Permittee operating a 2007 model year and later stationary CI ICE or a CI fire pump engine that is manufactured during or after the model year that applies to the fire pump engine power rating in Table 3 of 40 CFR Part 60, Subpart IIII, shall comply by purchasing an engine certified to the emission standards in 40 CFR 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's specifications.

[40 CFR 60.4211 (c)]

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

[40 CFR 60.4211(g)]

# a. CI ICE less than 100 HP

The Permittee shall keep a maintenance plan and records of conducted maintenance to demonstrate compliance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if the Permittee does not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or change the emission-related settings in a way that is not permitted by the manufacturer, the Permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

b. CI ICE greater than or equal to 100 HP and less than or equal to 500 HP

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



performance test to demonstrate compliance with the applicable emission standards within 1 year of such action or within 1 year after the engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the Permittee changes emission-related settings in a way that is not permitted by the manufacturer.

c. CI ICE greater than 500 HP

The Permittee shall keep a maintenance plan and records of conducted maintenance to demonstrate compliance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after changing any non-permitted emission-related setting on the engine. Subsequent tests shall be conducted every 8760 hours of engine operation or 3 years, whichever comes first.

3. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with 40 CFR 60.4211(c), 40 CFR 60.4211(g), and 40 CFR 63 Subpart ZZZZ.

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

G. Recordkeeping Requirements

[40 CFR 60.4214(b)]

- 1. Starting with model years in Table 5 of 40 CFR 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 the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter.
- 2. The Permittee shall record the dates and start and stop times when the ICE is operated and the reason it was in operation during that time.
- 3. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with 40 CFR 60.4214(b) and 40 CFR 63 Subpart ZZZZ.

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

## VI. FUGITIVE DUST REQUIREMENTS

**A.** Applicability

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

**B.** Particulate Matter and Opacity

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



- 1. Emission 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 not cause, allow or permit visible emissions from any fugitive dust point source, in excess of 20 percent opacity. [A.A.C-R18-2-702.B]
- c. 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;

[Pima SIP Rule 316.B and 318, 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;

[Pima SIP Rule 315.D and 318, 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;

[Pima SIP Rule 315.D, 316.B, and 318, 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;

[Pima SIP Rule 316.C, 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;

[Pima SIP Rule 316.A, 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;

[Pima SIP Rule 316.D, A.A.C. R18-2-607.A]

(7) Operate stacking and reclaiming machinery utilized at storage

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

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

(9) 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]

d. The Permittee shall not construct new unpaved service roads or unpaved haul roads such that the total lengths of operational unpaved roads do not exceed those used in the permit application or that would result in the exceedance of a modeling parameter.

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

### e. Air Pollution Control Requirements

(1) <u>The Permittee shall pave the entrance road leading to Rosemont</u> project from the State Route 83 and light duty roads as described in the map listed in Attachment "E".

[A.A.C. R18-2-306.01 and -331.A.3. d] [Material Permit Conditions are indicated by underline and italics]

[Material Permit Conditions are indicated by underline and italics]

- (2) <u>Water, or an equivalent control, shall be used to control visible</u> <u>emissions from haul roads and storage piles.</u> [Pima SIP 315.D and 316.D, A.A.C. R18-2-306.A.2 and -331.A.3.e]
- (3) <u>The Permittee shall comply with the dust control measures</u> <u>identified in the Dust Control Plan specified in Attachment "D"</u> of this permit.

[A.A.C. R18-2-306.A.2 and -331.A.3.e] [Material Permit Conditions are indicated by underline and italics]

(4)

<u>The Permittee shall use appropriate means, such as berms, signs</u> <u>or other effective procedures, to restrict traffic usage to the</u> <u>treated areas.</u> Should there be a rock spill on a roadway such that traffic is blocked, the Permittee shall clean up the spill; under no circumstances is traffic to be diverted to untreated areas to avoid the spill. This condition does not prohibit cleanup equipment from using untreated areas in the course of cleanup activities.

> [Pima SIP 315.D, A.A.C. R18-2-306.A.2 and -331.A.3.d and e] [Material Permit Conditions are indicated by underline and italics]

- (5) Mineral Tailings
  - (a) The Permittee shall comply with the approved dry tailings management plan (TMP) included in Attachment "F" of

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this permit to control particulate matter emissions from activities identified in the dry tailings management plan. The Permittee may implement proposed changes to the dry tailings management plan upon submission to the Director to further minimize fugitive dust. Nothing in this permit prohibits the Permittee from implementing additional dust control measures not set forth in the dust control plan.

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

- (b) The TMP in Attachment "F" addresses the following operational requirements:
  - (i) Tailings dust control during normal nonperimeter buttress construction operations;
  - (ii) Tailings dust control during perimeter buttress construction;
  - (iii) Tailings dust control at all other times; and
  - (iv) Additional tailings dust control and monitoring methods during periods of high winds.
- (6) The Permittee shall effectively control dust emissions from the transportation of materials by covering stock loads in open-bodied trucks, limiting vehicular speeds, or other equivalently effective controls.

[Pima SIP Rule 316.C, P.C.C. 17.16.100.C]

- f. Speed Limits on Haul Roads
  - (1) The Permittee shall post, provide training, and implement a speed limit of 35 mph for all light-duty vehicles travelling on the property.

[Pima SIP Rule 315.D, A.A.C. R18-2-306.A.2]

- 2. Monitoring and Recordkeeping Requirements
  - a. The Permittee shall keep records to demonstrate compliance with the speed limit in Condition VI.B.1.f(1).

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

b. The Permittee shall maintain records of the dates on which any of the activities listed in VI.B.1.c(1) through VI.B.1.c(9) above were performed and the control measures that were utilized.

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

- c. Opacity Monitoring Requirements
  - (1) Each week, the Permittee shall monitor visible emissions from fugitive sources excluding mineral tailings in accordance with Condition II.A.



(2) A certified observer shall conduct at least twice daily, surveys of visible emissions from the mineral tailings starting from the day the buttress construction begins. The locations are identified in the Visual Observation Plan.

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

#### d. Mineral Tailings

(1) The Permittee shall follow all the monitoring provisions identified in the approved TMP.

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

(2) When wind speeds are at or above 15 mph, or gusts at or above 20 mph, the Permittee shall physically inspect the tailings at least once daily for easily erodible areas.

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

(3) The Permittee shall review the TMP annually for its effectiveness in controlling fugitive emissions. The review shall be submitted to the Director by January 31st of each year (covering the period January 1<sup>st</sup> through December 31<sup>st</sup> of the previous year). If the review of the plan shows ineffectiveness in controlling emissions, the Permittee shall submit a revised plan for approval by April 1st following the annual review. The revised TMP shall show improved methods/techniques for reducing emissions in order to minimize or prevent further violations. The annual review shall take into account past compliance issues, resolved/unresolved including validated complaints reported the Department and propose how those issues can be avoided in the future. Recommendations or stricter requirements will be prescribed by the Department should the Permittee's annual review show that changes are required but not proposed by the Permittee.

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

#### e. Recordkeeping Requirements

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

- (1) The Permittee shall record the results of the required monitoring as detailed in the approved TMP.
- (2) When the wind speeds are at or above 15 mph, or gusts are at or above 20 mph, the Permittee shall maintain a record of all meteorological data, all tailings inspections, all control measures used and corrective action(s) taken to demonstrate compliance with the opacity limitations.
- (3) The Permittee shall maintain a copy of watering schedules per shift basis.
- f. Permit Shield



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Compliance with the conditions of this Section shall be deemed compliance with A.A.C. R18-2-604.A and B, 605.A and B, 606, 607.A and B, 614, 702.B and P.C.C17.16.040.A.1, 17.16.100.A&C., 17.16.050.A, and Pima County SIP Rules 315, 316, 318 and 343. [A.A.C. R18-2-325]

## VII. GASOLINE STORAGE AND DISPENSING

### **A.** Applicability

- 1. This Section applies to the following:
  - a. Gasoline Dispensing Facilities (GDFs), Storage tanks at the GDFs listed in Equipment List, Attachment "C", associated equipment components in vapor or liquid gasoline service, pressure/vacuum vents on gasoline storage tanks, and equipment necessary to unload product from cargo tanks into storage tanks at GDFs. The equipment used for the refueling of motor vehicles is not covered.

[40 CFR 63.11111 (a), (b), & (c), and 63. 11112(a)]

- b. Each gasoline cargo tank during the delivery of product to a GDF. [40 CFR 63.11111(a)]
- 2. Definition of Monthly Throughput

Monthly throughput means the total volume of gasoline that is loaded into, or dispensed from, all gasoline storage tanks at each GDF during a month. Monthly throughput is calculated by summing the volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the current day, plus the total volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the storage tanks at each GDF during the current day. Plus the total volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the previous 364 days, and then dividing that sum by 12. [40 CFR 63.11132]

### **B.** Operating Requirements

1.

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

[40 CFR 63.11115(a)]

- 2. 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:
  - a. Minimize gasoline spills;



- b. Clean up spills as expeditiously as practicable;
- c. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasket seal when not in use;
- d. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

[40 CFR 63.11116(a)]

3. Submerged Fill Pipes

[40 CFR 63.11117(b)]

- a. The Permittee shall only load gasoline into storage tanks by utilizing submerged fill pipes that are no more than 6 inches from the bottom of the storage tank.
- b. If the submerged fill pipes do not meet the specifications specified above, the Permittee shall demonstrate that the liquid level in the tank is always above the entire opening of the fill pipe. Documentation providing such demonstration must be made available for inspection by the Director or Administrator's delegated representative during the course of a site visit.
- 4. If any GDF referenced above increases the monthly throughput over 10,000 or 100,000 gallons per month, the Permittee shall comply with new applicable provisions of Subpart CCCCCC within 3 years of the GDF unit becoming subject to the new requirements.

[40 CFR 63.11113(c)]

5. All gasoline storage tanks shall be equipped with a submerged filling device, or acceptable equivalent, for the control of hydrocarbon emissions.

[Pima SIP Rule 314.A.1, A.A.C. R18-2-710.B]

6. All pumps and compressors which handle volatile organic compounds (VOCs) 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]

C. Recordkeeping Requirements

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

1. The Permittee shall maintain monthly record of the gasoline throughput of each GDF as detailed in Condition VII.A.2.

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

2. The Permittee shall have records available within 24 hours of request by the Director or Administrator documenting the gasoline throughput.

[40 CFR 63.11117(d)]

3. The Permittee shall, for the gasoline storage tanks, maintain a file of the typical Reid vapor pressure of gasoline stored and of dates of storage. Dates on which the storage vessel is empty shall be shown.

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



4. If the gasoline stored has a true vapor pressure greater than 470 mm Hg (9.1 psia), the Permittee shall record the average monthly temperature, and true vapor pressure of gasoline at such temperature.

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

5. The average monthly 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 temperature determined at least once every seven days.

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

6. 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), which is incorporated herein by reference and on file with the Office of the Secretary of State. This procedure is dependent upon determination of the storage temperature and the Reid vapor pressure, which requires sampling of the petroleum liquids in the storage vessels. Unless the Director requires in specific cases that the stored petroleum liquid be sampled, the true vapor pressure may be determined by using the average monthly storage temperature and the typical Reid vapor pressure. For those liquids for which certified specifications limiting the Reid vapor pressure exist, the Reid vapor pressure may be used. For other liquids, 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 Pima SIP Rule 314, A.A.C. R18-2-710.B, D, E.1, E.2.b, E.3 and E.4, 40 CFR 63.1111(a),(b),(c), 40 CFR 63.11112(a), 63.11113(c), 40 CFR 63.11115(a), 40 CFR 63.11116(b), and 40 CFR 63.11117(a), (d).

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

### VIII. STORAGE TANKS

**A.** Applicability

This Section is applicable to the storage tanks identified in the equipment list in Attachment "C" of this permit.

- **B.** Operating Requirements
  - 1. The Permittee shall not emit gaseous or odorous materials from the diesel storage tanks in such quantities or concentrations as to cause air pollution.

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

2. Materials including solvents or other volatile compounds, paints, acids, and alkalies shall be processed, stored, used and transported in such a manner and by such means that they will not evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage or discharge, the installation and use of such control methods, devices, or



equipment shall be mandatory.

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

3. Where a stack, vent, or other outlet is at such a level that 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 into adjoining property.

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

C. Permit Shield

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

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

#### IX. MOBILE SOURCE REQUIREMENTS

**A.** Applicability

The requirements of this Section are applicable to mobile sources which either move while emitting air contaminants or are frequently moved during the course of their utilization but are not classified as motor vehicles, agricultural vehicles, or agricultural equipment used in normal farm operations. Mobile sources shall not include portable sources as defined in A.A.C. R18-2-101.109.

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

#### **B.** Particulate Matter and Opacity

1. Emission Limitations/Standards

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]

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 this Section shall be deemed compliance with A.A.C. R18-2 - 804.

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

### X. 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.

[Pima SIP rule 316.E, 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 this Section shall be deemed compliance with Pima SIP Rule 316.E, 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 X.B.1.a(2), a photochemically reactive solvent shall be any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified in Conditions X.B.1.a(3)(a) through X.B.1.a(3)(c), or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:
  - (a) A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturation-hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones: 5 percent.
  - (b) A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: 8 percent.
  - (c) A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent.

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

4) Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups of organic compounds described in Conditions X.B.1.a(3)(a) through X.B.1.a(3)(c), 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) The Permittee shall maintain copies of the following:
    - (a) Safety Data Sheets (SDS) for all paints and solvents used at the facility;
    - (b) The amount of each paint used each year; and

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- (c) Statement of how overspray control is maintained for each area where non-exempt spraying occurs.
- (2) Architectural coating and spot painting projects shall be exempt from the recordkeeping requirements of Condition X.B.1.b(1). [A.A.C. R18-2-306.A.3.c]
- c. Permit Shield

Compliance with this Section 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 conditions of this Section 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). Notices shall be filed with the Pima County Department of Environmental Quality.

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

2. Monitoring and Recordkeeping Requirement

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

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

3. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with A.A.C. R18-2-1101.A.12.

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

#### XI. PUBLIC ACCESS RESTRICTIONS

At least 90 days prior to beginning construction of the mine, the Permittee shall submit to the Director a Public Access Restriction Plan (Plan) that includes measures such as fencing, natural



topographic barriers, signage, security patrols, and access restrictions to adjacent private property to restrict public access to the Rosemont project site. The Plan shall be implemented within 30 days after approval by the Director.

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

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

## XII. AMBIENT MONITORING REQUIREMENTS

- **A.** General Requirements
  - 1. All ambient air quality monitoring required under this Section shall be conducted in accordance with the following:
    - a. The permittee shall have a written and ADEQ approved quality assurance project/program plan (QAPP) prior to the start of ambient air monitoring. [A.A.C. R18-2-215.B]
- **B.** General Reporting and Recordkeeping Requirements

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

- 1. The Permittee shall retain records of all monitoring data in accordance with Section XIII of Attachment "A". The data shall be available to ADEQ upon request.
- 2. Quarterly reports, annual reports and the associated quality assurance information shall be submitted to the Facilities Emissions and Control Section of the Air Quality Division of ADEQ. The fourth quarterly report for the year should include an annual summary of measurements and QA/QC data, as applicable for each monitor.
- 3. Updated site and monitor metadata information shall be included in the annual reports as applicable.
- 4. Reports shall be submitted within 90 days after the end of each calendar-year quarter unless otherwise stated by the applicable requirement.
- 5. Summary data reports shall be consistent with EPA data handling requirements.
- 6. The Permittee may submit reports electronically to the Department.
- 7. All data submitted to the Director shall be reviewed, quality assured, and certified by the Permittee. All of the field documents, QC check documents, etc., need to be submitted with the applicable reports.
- 8. The Permittee shall provide electronic files of the validated hourly data at the request of the Department.
  - a. All data and quarterly reports shall be submitted electronically as follows:
    - (1) Data recovery reports;
    - (2) Any field service activities;



- (3) Any other information required in the monitoring protocol;
- (4) Description of any instrument problems affecting the data, any data validation concerns, and any comments on meteorological conditions occurring during the quarter; and
- (5) Performance results of calibration and audits.
- 9. Notwithstanding the reporting and data submittal requirements of this section, units shall be consistent with EPA standards (NAAQS) and reporting requirements. If EPA standards or reporting requirements change, the data reporting format and units shall be changed accordingly.
- C. Meteorological Monitoring Requirements
  - 1. The Permittee shall comply with the approved monitoring and reporting protocol and a Quality Assurance Project Plan (QAPP) for the installation and operation of a meteorological monitoring station in accordance with Section XII.A.1.a of Attachment "B". The Permittee may implement proposed changes to the monitoring and reporting protocol or the quality assurance project plan (QAPP) upon submission to the Director. The Permittee shall utilize appropriate EPA guidance for the collection of the meteorological data to be used in air quality dispersion models.
  - 2. At least 90 days prior to the startup of the mine operations, the Permittee shall install, maintain and operate a meteorological monitoring station to record wind speed, vector wind direction, standard deviation of wind direction,  $\Delta t$ , and relative humidity. This monitoring station shall be located at the approximate coordinates of 31° 49' 19.30" N, 110° 42' 51.70" W Universal Transverse Mercator (UTM) 527032 E, 3520745 N, Zone 12S, World Geodetic System (WGS) 84. The station will be installed, maintained, and operated in accordance with the written and approved QAPP, which is consistent with the monitoring protocol approved by the Director, addressing all general requirements, meteorological station operations, and quality assurance initiatives.
  - 3. Sampling Frequency
    - a. The Permittee shall operate the monitors continuously, collecting consecutive hourly readings except during periods of routine maintenance, instrument calibration or malfunction.
    - b. In the event of system malfunction, the unit shall be repaired or replaced as soon as possible. Monitoring shall resume as soon as practicable after the correction of the malfunction problem. The Permittee shall report the malfunction to the Director within 24 hours of discovery. A malfunction shall mean equipment or operation issues other than routine maintenance or instrument calibration that result in invalidating a 24-hour sampling day. The report shall contain the probable reason for malfunction and a plan for repairing or replacing the affected equipment. The Permittee shall



notify ADEQ if any malfunctions are not corrected within 5 business days.

- 4. Meteorological Monitoring Quality Assurance/Quality Control
  - a. The Permittee shall have a written and approved QAPP prior to the start of meteorological monitoring.
  - b. The Permittee shall conduct quality assurance activities as stated in the written and approved QAPP in accordance with Section XI.A.1.a of Attachment "B".
  - c. The Permittee and/or its monitoring contractor shall participate in technical systems audits or performance audits periodically conducted by the Department. The Department shall provide a minimum of 30 days' notice of a technical systems audit and a minimum of 48 hours' notice of a performance audit.
- 5. Reporting Requirements
  - a. The permittee shall provide an electronic report summarizing the meteorological data measurements collected pursuant to this section shall be submitted in accordance with Condition XII.B of Attachment "B".
  - b. The Permittee shall provide wind rose plots of the winds in the quarterly report.
  - c. The Permittee shall provide electronic files of the validated hourly data at the request of the Department.
- **D.**  $PM_{10}$  Monitoring
  - 1. The Permittee shall comply with the approved quality assurance project plan (QAPP) for the installation and operation of a PM<sub>10</sub> monitor in accordance with Section XII.A.1.a of Attachment "B". The Permittee may implement proposed changes to the monitoring and reporting protocol or the quality assurance project plan (QAPP) upon submission to the Director. The Permittee shall utilize appropriate EPA guidance for the collection of the air quality data.
  - 2. At least 90 days prior to the startup of mine operations, the Permittee shall install, operate, and maintain one continuous particulate matter monitor. The  $PM_{10}$  monitor shall be collocated with the meteorological monitoring station required in Condition XII.C.2 and located at the approximate coordinates of 31° 49' 19.30" N, 110° 42' 51.70" W Universal Transverse Mercator (UTM) 527032 E, 3520745 N, Zone 12S, World Geodetic System (WGS) 84. The station will be installed, maintained, and operated in accordance with the written and approved QAPP, which is consistent with the monitoring protocol approved by the Director, addressing all general requirements, particulate matter station operations, and quality assurance initiatives.
  - 3. The Permittee shall calculate the monitored daily average  $PM_{10}$  value in accordance with 40 CFR Parts 50 and 58 and their appendices.

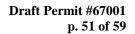


f.

- a. If the monitored daily average of  $PM_{10}$  is greater than the Alert Level of 110 µg/m3, the Permittee shall notify the Director by email or facsimile within 48 hours of discovery.
- b. Within 30 days of the day the Alert Level was triggered, the Permittee shall submit a report to the Director that includes:
  - (1) Whether the Alert Level exceedance was or was not primarily caused by the Permittee's operations; and
  - (2) Indicate interim measures that the Permittee has been taking to reduce ambient  $PM_{10}$  levels pending investigation. These interim measures may include but are not limited to additional watering, chemical dust suppressants, or reduction or suspension of certain activities in specific areas. The interim measures shall continue to be implemented until the proposed actions of Condition XII.D.3.c in the thirty-day report, or the alternative control plan of Condition XII.D.3.f, are approved and implemented.
- c. If the Permittee's operations did primarily cause the exceedance, the Permittee shall include the following in the thirty-day report:

Proposed actions that may include but are not limited to additional watering, application of chemical dust suppressants, addition of engineering controls, or reduction or cessation in certain activities that would return ambient conditions to less than the Alert Level.

- d. The Permittee shall implement the proposed actions in Condition XII.D.3.c within 5 days of approval by the Director.
- e. Seventy days after the proposed actions are in place, the Permittee shall submit a report to the Director on whether the proposed actions should be finalized as a revision to the Dust Control Plan as proposed or whether additional revisions proposed in the seventy-day report should be finalized in lieu of the initial submission.
  - It shall be the responsibility of the Permittee to demonstrate to the satisfaction of the Director whether the exceedance was or was not primarily caused by the Permittee's operations. If such concentrations are not shown to be primarily the result of emissions from a source or sources other than the Permittee, the Permittee shall be required to develop an alternative control plan in accordance with Condition XII.D.3 as applicable. The Director may disapprove an alternative control plan and require the Permittee to submit additional controls if the plan is inadequate to restore ambient levels to less than the Alert Level. Action by the Director pursuant to this condition shall constitute appealable agency action.
- g. Exceedance of an Alert Level is not a violation of this permit nor is it necessarily indicative of an exceedance of a national ambient air quality standard. Failure to provide notifications, undertake investigations,





implement interim or final measures, or submit reports shall constitute a violation of this permit.

- 4. Sampling Frequency
  - a. The Permittee shall operate the monitor continuously, collecting consecutive hourly readings except during periods of routine maintenance, instrument calibration or malfunction.
  - b. In the event of system malfunction, the unit shall be repaired or replaced as soon as possible. Monitoring shall resume as soon as practicable after the correction of the malfunction problem. The Permittee shall report the malfunction to the Director within 24 hours of discovery. A malfunction shall mean equipment or operation issues other than routine maintenance or instrument calibration that result in invalidating a 24-hour sampling day. The report shall contain the probable reason for malfunction and a plan for repairing or replacing the affected equipment. The Permittee shall notify ADEQ if any malfunctions are not corrected within 5 business days.
- 5. PM<sub>10</sub> Monitoring Quality Assurance/Quality Control
  - a. The Permittee shall have a written and approved QAPP prior to the start of  $PM_{10}$  monitoring.
  - b. The permittee shall conduct quality assurance activities as stated in the written and approved QAPP in accordance with Section XII.A.1.a of Attachment "B".
  - c. The Permittee shall conduct monthly flow checks on the monitoring equipment during the 1st half of every calendar month.
  - d. The Permittee shall conduct semi-annual (every six months) performance audits of the monitoring equipment in accordance with the requirements pertaining to sampler accuracy as specified in Appendix A of 40 CFR Part 58. The performance audits shall be conducted by a qualified auditor that is independent of the Permittee.
  - e. The Permittee shall conduct technical systems audits of the  $PM_{10}$  ambient air monitoring program consistent with the Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II, U.S. Environmental Protection Agency. The technical systems audits shall be conducted by a qualified auditor that is independent of the Permittee at least once in every three (3) years.
  - f. The Permittee and/or its monitoring contractor shall participate in technical systems audits or performance audits periodically conducted by the Department. The Department shall provide a minimum of 30 days' notice of a technical systems audit and a minimum of 48 hours' notice of a performance audit.
- 6. PM<sub>10</sub> Monitoring Reporting Requirements



- a. The Permittee shall calculate the quarterly and annual summary statistics in accordance with the procedures of 40 CFR Part 50 and Appendices.
- b. The Permittee shall calculate the precision and accuracy statistics in accordance with the procedures of 40 CFR Part 58 Appendix A.
- c. Valid data recovery shall meet the EPA minimum data completeness requirement of 75 percent per quarter or the percentage specified in 40 CFR Part 50. Valid data shall refer to all observations collected for the specific monitoring purpose. Data collected during precision, audit, flow checks and during servicing shall not be considered valid for data completeness purposes.
- d. The Permittee shall submit to the Director, an electronic report summarizing the meteorological data measurements collected pursuant to this section shall be submitted in accordance with Condition XI.B of Attachment "B" in accordance with Condition XI.B of Attachment "B".
- e. The Permittee shall submit daily 24-hour average concentrations in the quarterly report based on EPA data rules in 40 CFR Part 50 Appendix K.
- f. The Permittee shall provide electronic files of the validated hourly data at the request of the Department.



# ATTACHMENT "C": EQUIPMENT LIST

Equipment	Qty	Max Capacity	Make / Model	Date of Manu- facture	Equipment ID / Serial Number	NSPS / A.A.C	
Primary Crushing, Conveying, Coarse Ore Storage, & Reclaim Conveying							
Crusher Dump Pocket	1	TBD				NSPS	
-						Subpart LL	
Primary Crusher	1	TBD			PCr	NSPS	
						Subpart LL	
Primary Crusher Vault	1	TBD				NSPS	
						Subpart LL	
Crusher Discharge Feeder	1	TBD			F-CD	NSPS	
					<u> </u>	Subpart LL	
Stockpile Feed Conveyor	1	TBD			CV-SF1	NSPS	
	1	12,000	<u> </u>			Subpart LL	
Primary Crusher Dust Collector	1	12,000	Cartridge		AE-001/PC-	NSPS Subment L	
De 1. de De 1. de	4	acfm	Filter		CADC	Subpart LL	
Reclaim Feeders	4	TBD			F-R1/R4	NSPS Subpart LL	
SAC Mill Conveyors	2	TBD			CV-SMF	NSPS	
SAG Mill Conveyors	2	IBD			CV-SIVIF	Subpart LL	
Stockpile Building Dust Collector	1	55,000	Cartridge		AE-002/ PC-	NSPS	
Stockpile Building Dust Collector	1	acfm	Filter		SDC	Subpart LL	
Reclaim Tunnel Line & Pebble	2	33,000	Cartridge		AE-003, AE-	NSPS	
Crusher Line Dust Collector	2	acfm	Filter		004/ PC-	Subpart LL	
Crusher Enter Dust Concetor		uerin	1 mer		RTPC	Subpart	
SAG Mill	2	TBD			M-SAG	NSPS	
						Subpart LL	
Trommel Screen	2	TBD			Sn-T	NSPS	
						Subpart LL	
Pebble Conveyor	2	TBD			CV-Pb1	NSPS	
						Subpart LL	
Pebble Crusher Bin Diverter Gate	2	TBD				NSPS	
						Subpart LL	
Pebble Crusher Bin	2	TBD				NSPS	
						Subpart LL	
Pebble Crusher Feeder	2	TBD			F-PbC	NSPS	
						Subpart LL	
Pebble Crusher	2	TBD			PbC	NSPS	
						Subpart LL	
Pebble Crusher Product Conveyor	2	TBD			CV-Pb		
SAG Mill Feed Conveyor	2	TBD					
Flotation, Regrind, and Concentration							
Copper/ Molybdenum/ Tailings Flotation and Concentrating Equipment (Flotation cells, column cells, thickeners, filters)	N/ A	N/A			Various	AZ SIP Rule 9-3- 521	
Copper Regrind Mills	2	11'-8" L x			M- CR1/CR2	NSPS	
Copper Regime Mills	2 ×	11 -8 L X 13'-4" W				Subpart LL	
		13-4 W				Subpart	



Molybdenum Regrind Mill14' L x 4'- 4' WMeM-MR Subpart LL NSPS Subpart LL NSPS Subpart LL NSPS Dust CollectorM-MR 14 tons per hourM-MCR hourNSPS Subpart LL NSPS Dust CollectorM-MCR NSPS Subpart LLMolybdenum Concentrate Building14 tons per hourAE-005/PCNSPS Subpart LLMolybdenum Concentrate Dryer1N/AD-MCNSPS Subpart LLMolybdenum Dryer Scrubber1500 acfm 2Cyclone Subpart LLAE-013/PCNSPS Subpart LLMolybdenum Dryer Scrubber1TBDAE-011/PCNSPS Subpart LLMolybdenum Dryer Scrubber1500 acfm FilterCarridgeAE-011/PCNSPS Subpart LLMolybdenum Concentrate Bag Colector1TBDAE-012/PCNSPS Subpart LLMolybdenum Concentrate Bag Loader1500 acfm FilterCarridgeAE-011/PCNSPS Subpart LLMolybdenum Concentrate Bag Loader1TBDAE-012/PC Subpart LLNSPS Subpart LLMolybdenum Concentrate Bag Loader1TBDAA-012/PC Subpart LLMolybdenum Concentrate Bag Loader1TBDAA-012/PC Subpart LLMolybdenum Concentrate Bag Loader1TBDAA-012/PC Subpart LLMolybdenum Concentrate Bag Loader1TBDAA-C 730Tailings Transfer Conveyor1TBDAA-C 730Tailings Overland Conveyor1TBDAA-C 730T	Equipment	Qty	Max Capacity	Make / Model	Date of Manu-	Equipment ID / Serial	NSPS / A.A.C		
A Molybdenum Cleaner Regrind MillA 4 tons per hourA' W hourM-MCR M-MCR Subpart LL Subpart LL Subpart LL Subpart LLCopper Concentrate Building Dust Collector155,000AE-005/PCSubpart LL Subpart LLMolybdenum Concentrate Dryer Molybdenum Dryer Scrubber1N/AD-MCNSPS Subpart LLMolybdenum Dryer Scrubber1500 acfmCyclone ScrubberAE-013/PCNSPS 	Maluhdanum Dagnind Mill	1	4' L 4'		facture	Number	NCDC		
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Diverter ChuteIITBDIA.A.C 730Tailings Shuttle Conveyor1TBDIA.A.C 730Primary Shiftable Conveyor2TBDIA.A.C 730Primary Super Portable Conveyor1TBDIA.A.C 730Primary Horizontal Feed1TBDIA.A.C 730Primary Horizontal Conveyor1TBDIA.A.C 730Primary Horizontal Conveyor1TBDIA.A.C 730Primary Horizontal Conveyor1TBDIA.A.C 730Primary StackerITBDIA.A.C 730Secondary Shiftable Conveyor1TBDIA.A.C 730Secondary Super Portable1TBDIA.A.C 730Secondary Super Portable1TBDIA.A.C 730Secondary Horizontal Feed1TBDIA.A.C 730Secondary Horizontal Conveyor1TBDIA.A.C 730Secondary Radial Stacker1TBDIA.A.C 730Emergency Power Generator11345 kWIIS45 kW									
Primary Shiftable Conveyor1TBDA.A.C 730Primary Super Portable Conveyor2TBDA.A.C 730Primary Horizontal Feed Conveyor1TBDA.A.C 730Primary Horizontal Conveyor1TBDA.A.C 730Primary Stacker1TBDA.A.C 730Primary Stacker1TBDA.A.C 730Secondary Shiftable Conveyor1TBDA.A.C 730Secondary Super Portable Conveyor1TBDA.A.C 730Secondary Super Portable Conveyor1TBDA.A.C 730Secondary Horizontal Feed Conveyor1TBDA.A.C 730Secondary Horizontal Conveyor1TBDA.A.C 730Secondary Horizontal Feed Conveyor1TBDA.A.C 730Secondary Horizontal Conveyor1TBDA.A.C 730Secondary Radial Stacker1TBDA.A.C 730Fuel Burnius EquipmentEmergency Power Generator11345 kWNSPS			IDD				A.A.C 750		
Primary Super Portable Conveyor2TBDA.A.C 730Primary Horizontal Feed1TBDA.A.C 730Conveyor1TBDA.A.C 730Primary Horizontal Conveyor1TBDA.A.C 730Primary StackerTBDA.A.C 730Secondary Shiftable Conveyor1TBDA.A.C 730Secondary Super Portable1TBDA.A.C 730Secondary Super Portable1TBDA.A.C 730Secondary Horizontal Feed1TBDA.A.C 730Secondary Horizontal Feed1TBDA.A.C 730Secondary Horizontal Conveyor1TBDA.A.C 730Secondary Horizontal Feed1TBDA.A.C 730Secondary Horizontal Conveyor1TBDA.A.C 730Secondary Radial Stacker1TBDA.A.C 730Fuel Burning EquipmentEmergency Power Generator11345 kWNSPS	Tailings Shuttle Conveyor	1	TBD				A.A.C 730		
Primary Horizontal Feed Conveyor1TBDA.A.C 730Primary Horizontal Conveyor1TBDA.A.C 730Primary Stacker7TBDA.A.C 730Secondary Shiftable Conveyor1TBDA.A.C 730Secondary Super Portable Conveyor1TBDA.A.C 730Secondary Horizontal Feed Conveyor1TBDA.A.C 730Secondary Horizontal Feed Conveyor1TBDA.A.C 730Secondary Horizontal Feed Conveyor1TBDA.A.C 730Secondary Horizontal Conveyor1TBDA.A.C 730Secondary Radial Stacker1TBDA.A.C 730Fuel Burning EquipmentEmergency Power Generator11345 kWNSPS	Primary Shiftable Conveyor	1	TBD				A.A.C 730		
Primary Horizontal Feed Conveyor1TBDA.A.C 730Primary Horizontal Conveyor1TBDA.A.C 730Primary Stacker7TBDA.A.C 730Secondary Shiftable Conveyor1TBDA.A.C 730Secondary Super Portable Conveyor1TBDA.A.C 730Secondary Horizontal Feed Conveyor1TBDA.A.C 730Secondary Horizontal Feed Conveyor1TBDA.A.C 730Secondary Horizontal Conveyor1TBDA.A.C 730Secondary Horizontal Conveyor1TBDA.A.C 730Secondary Radial Stacker1TBDA.A.C 730Fuel Burning EquipmentEmergency Power Generator11345 kWNSPS	Primary Super Portable Conveyor	2	TBD				A.A.C 730		
Primary Horizontal Conveyor1TBDA.A.C 730Primary StackerTBDA.A.C 730Secondary Shiftable Conveyor1TBDA.A.C 730Secondary Super Portable Conveyor1TBDA.A.C 730Secondary Horizontal Feed Conveyor1TBDA.A.C 730Secondary Horizontal Conveyor1TBDA.A.C 730Secondary Horizontal Conveyor1TBDA.A.C 730Secondary Horizontal Conveyor1TBDA.A.C 730Secondary Radial Stacker1TBDA.A.C 730Fuel Burning EquipmentEmergency Power Generator11345 kWNSPS	Primary Horizontal Feed		TBD				A.A.C 730		
Primary StackerTBDTBDA.A.C 730Secondary Shiftable Conveyor1TBDA.A.C 730Secondary Super Portable Conveyor1TBDA.A.C 730Secondary Horizontal Feed Conveyor1TBDA.A.C 730Secondary Horizontal Conveyor1TBDA.A.C 730Secondary Horizontal Conveyor1TBDA.A.C 730Secondary Horizontal Conveyor1TBDA.A.C 730Secondary Radial Stacker1TBDA.A.C 730Fuel Burning EquipmentEmergency Power Generator11345 kWNSPS		1	TBD				A.A.C 730		
Secondary Shiftable Conveyor1TBDA.A.C 730Secondary Super Portable Conveyor1TBDA.A.C 730Secondary Horizontal Feed Conveyor1TBDA.A.C 730Secondary Horizontal Conveyor1TBDA.A.C 730Secondary Horizontal Conveyor1TBDA.A.C 730Secondary Horizontal Conveyor1TBDA.A.C 730Secondary Radial Stacker1TBDA.A.C 730Fuel Burning EquipmentEmergency Power Generator11345 kWNSPS						-			
Secondary Super Portable Conveyor1TBDA.A.C 730Secondary Horizontal Feed Conveyor1TBDA.A.C 730Secondary Horizontal Conveyor1TBDA.A.C 730Secondary Horizontal Conveyor1TBDA.A.C 730Secondary Radial Stacker1TBDA.A.C 730Fuel Burning EquipmentEmergency Power Generator111345 kWNSPS	-	1	TBD						
Secondary Horizontal Feed Conveyor1TBDA.A.C 730Secondary Horizontal Conveyor1TBDA.A.C 730Secondary Radial Stacker1TBDA.A.C 730Fuel Burning EquipmentEmergency Power Generator111345 kWNSPS	Secondary Super Portable	1	TBD				A.A.C 730		
Secondary Horizontal Conveyor1TBDImage: Conversion of the second	Secondary Horizontal Feed	1	TBD				A.A.C 730		
Secondary Radial Stacker     1     TBD     A.A.C 730       Fuel Burning Equipment       Emergency Power Generator     1     1345 kW     NSPS		1	TBD				A.A.C 730		
Emergency Power Generator     1     13/15 kW     NSPS									
Emergency Power Generator   1   13/5 kW   NSPS									
	Emergency Power Generator	1					NSPS		
			1345 kW				Subpart		



Equipment	Qty	Max Capacity	Make / Model	Date of Manu-	Equipment ID / Serial	NSPS / A.A.C	
				facture	Number	IIII,	
						NESHAP	
						Subpart	
						ZZZZ	
Primary Crusher Fire Water	1	400			PCFWP	NSPS	
Pump		horsepower				Subpart IIII,	
						NESHAP	
						Subpart	
						ZZZZ	
		Miscellan	eous Sources				
Quicklime Storage Bin/Tank	1	9,500				A.A.C 730	
	1	gallons					
Quicklime Screw Feeder Conveyor	1	TBD				A.A.C 730	
Quicklime Slaking Mill Feed	1	TBD				A.A.C 730	
Chute		155				11110700	
Quicklime Slaking Mill	1	TBD				A.A.C 730	
Lime Slaking Discharge Chute	1	TBD				A.A.C 730	
Lime Scrubber	1	500 acfm	Wet Scrubber		AE-015/PC- LS	A.A.C 730	
Quicklime Dust Collector	1	1,159 acfm	Cartridge		AE-	A.A.C 730	
			Filter		009/PC-		
Sodium Metaphosphate Bin	1	TBD			QLDC	A.A.C 730	
Flocculant Feed Bin	1	TBD				A.A.C 730	
Flocculant Screw Feeder	1	TBD				A.A.C 730	
Flocculant Receiving Hopper	1	TBD				A.A.C 730	
Flocculant Hopper Dust Filter	1	500 acfm	Cartridge		AE-	A.A.C 730	
Unit			Filter		014/PC-	11110700	
					FHDF		
Flocculant Venturi	1	TBD				A.A.C 730	
		Т	anks				
MIBC (Frother) Storage Tank	1	22,520			T-MIBCS	A.A.C 730	
		gallons			T DEC		
Diesel Fuel Storage Tanks – Heavy Vehicles	2	100,500			T-DFS- HV1/HV2	A.A.C 730	
Plant Diesel Storage Tank	1	gallons 10,000			T-DFS-LV1	A.A.C 730	
That Dieser Storage Tank	1	gallons				1.1.1.0 / 50	
Gasoline Storage Tank	1	12,000				A.A.C 710	
		gallons				Pima SIP	
						314.A.1	
Other Pollution Control Equipment							
Collector Storage and Distribution Tanks Stack	1	1,000 acfm			PC-CSDT	A.A.C 721	
Collector Area Ventilation Fan Stack	1	500 acfm			PC-CAVF	A.A.C.721	



Equipment	Qty	Max	Make /	Date of	Equipment	NSPS /
		Capacity	Model	Manu-	ID / Serial	A.A.C
				facture	Number	
Primary Crusher Fog System	1				PC-PCFS	A.A.C.721
Laboratory Dust Collectors	3	10,000	Cartridge		PC-	A.A.C. 721
		acfm	Filter		LDC1/LCD2	
					/L DC3	

NOTE: All missing equipment data will be updated upon purchase of equipment.



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## ATTACHMENT "D": DUST CONTROL PLAN

(See Attached)



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## ATTACHMENT "E": MAP OF PAVED ROADS

(See Attached)



## ATTACHMENT "F": DRY TAILINGS MANAGEMENT PLAN

(See Attached)