



## ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

### AIR QUALITY CLASS II SYNTHETIC MINOR PERMIT

**COMPANY:** Mineral Park, Inc.  
**FACILITY:** MPI Facility  
**PERMIT #:** 44232  
**DATE ISSUED:**  
**EXPIRY DATE:**

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#### SUMMARY

This Class II Renewal Air Quality Control Permit is issued to Mineral Park, Inc. ("MPI" and "the Permittee"), located at 8275 Mineral Park Road, Golden Valley, AZ 86413, for a facility located approximately 15 miles northwest of Kingman, and five miles east of Highway 93 on Mineral Park Road. This renewal permit is for the continued operation of a copper leaching solvent extraction-electrowinning (SX/EW) process, and the construction and operation of a new 50,000 ton-per-day (maximum design basis) mining, milling, and flotation recovery operation producing copper-silver and molybdenum concentrates. This permit supersedes Class II Permit Number 31989.

Air pollutant emissions are primarily the result of the mining, sizing and conveyance of metallic ore. The primary pollutants are particulate matter (PM), particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM<sub>10</sub>) and carbon monoxide (CO). Emissions of other pollutants, including sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), volatile organic compounds (VOC) and hazardous air pollutants (HAP) are emitted from this source.

The facility has potential to emit, without controls, more than 100 tons per year (tpy) of PM<sub>10</sub>. The Permittee is accepting voluntary operating limits and air pollution control requirements to stay below the major source threshold for this pollutant, therefore, the Class II permit required under Arizona Administrative Code (A.A.C.) R18-2-302.B.2 is a synthetic minor per A.A.C. R18-2-301.20.

This permit is issued in accordance with the Arizona Revised Statutes (A.R.S.). It contains requirements from Arizona Administrative Code (A.A.C.) Title 18, Chapter 2 and the Code of Federal Regulations (C.F.R.).

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## ATTACHMENT "A": GENERAL PROVISIONS

### Air Quality Control Permit No. 44232 For *Mineral Park, Inc.*

#### I. PERMIT EXPIRATION AND RENEWAL

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

- A. This permit is valid for a period of five years from the date of issuance.
- B. The Permittee shall submit an application for renewal of this permit at least 6 months, but not more than 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 air quality statutes and air quality rules. Any permit noncompliance constitutes a violation of the Arizona Revised Statutes and 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.
  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 reissue 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.A.C. R18-2-315]

- A. The Permittee shall post this permit or a certificate of permit issuance where the facility is located 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 31st or ninety 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.

#### 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.

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. The identification of the methods or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period;
  3. The 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.A.2 above. The certifications shall identify each deviation and take it into account for consideration in the compliance certification;
  4. All instances of deviations from permit requirements reported pursuant to Condition XII.B of this Attachment; and
  5. Other facts the Director may require determining the compliance status of the source.
- B.** A progress report on all outstanding compliance schedules shall be submitted every six months beginning with six months after permit issuance.

#### **VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS**

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

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.C]

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**

[40 CFR Part 68]

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 and -310.01.B]

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:

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

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

b. The report shall contain the following information:

i. Identity of each stack or other emission point where the excess emissions occurred;

ii. 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;

- iii. Date, time and duration, or expected duration, of the excess emissions;
  - iv. Identity of the equipment from which the excess emissions emanated;
  - v. Nature and cause of such emissions;
  - vi. 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; and
  - vii. Steps taken to limit the excess emissions. 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 above.

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

**B. Permit Deviations Reporting**

[A.A.C. R18-2-306.A.5.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. Prompt reporting shall mean that the report was submitted to the Director by certified mail, facsimile, or hand delivery within two working days of the time when emission limitations were exceeded due to an emergency or within two working days of the time when the owner or operator first learned of the occurrence of a deviation from a permit requirement.

**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 source, including acts of God, that require immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

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

This rule 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 below, and unless otherwise provided for in the applicable requirement, emissions in excess of an applicable emission limitation due to startup and shutdown shall constitute a violation. When emissions in excess of an applicable emission limitation are due to startup and shutdown, the Permittee has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the Permittee has complied with the reporting requirements of A.A.C. R18-2-310.01 and has demonstrated all of the following:
  - i. The excess emissions could not have been prevented through careful and prudent planning and design;
  - ii. 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;
  - iii. 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;
  - iv. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
  - v. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
  - vi. 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;

- vii. All emissions monitoring systems were kept in operation if at all practicable; and
  - viii. 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 above.
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 above.

5. Demonstration of Reasonable and Practicable Measures

For an affirmative defense under Condition XII.E.2 or XII.E.3 above, 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. RECORD KEEPING 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 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.

- C. All required records shall be maintained either in an unchangeable electronic format or in a handwritten logbook utilizing indelible ink.

#### **XIV. REPORTING REQUIREMENTS**

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

The Permittee shall submit the following reports:

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

#### **XV. DUTY TO PROVIDE INFORMATION**

[A.A.C. R18-2-304.G 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 do 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 below, 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. R18-2-101.57.a through A.A.C. R18-2-101.57.i 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 above, the written notice shall be by certified mail or hand delivery and shall be received by the Director the minimum amount of time in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided with less than required notice, but must be provided as far in advance of the change, or if advance notification is not practicable, as soon after the change as possible. The written notice shall include:
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 above without the required notice by applying for a minor permit revision under A.A.C. R18-2-319 and complying with subsection A.A.C. R18-2-319.D.2 and A.A.C. R18-2-319.G.
- 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 XVII.C above, the source shall comply with Condition XVII.C above. If a source change is described under

both Condition XVII.C above and A.A.C. R18-2-317.01.B, the source shall comply with A.A.C. R18-2-317.01.B.

**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

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

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 5 years from the date created. Logging shall be performed in indelible ink in a bound log book with sequentially numbered 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**

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

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

**XX. SEVERABILITY CLAUSE**

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

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**

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

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

## ATTACHMENT "B": SPECIFIC CONDITIONS

### Air Quality Control Permit No. 44232 For Mineral Park, Inc.

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

[ARS § 49-404.c and -426]

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.

#### II. FACILITY-WIDE LIMITATIONS

##### A. Operating Limitations

Within 120 days of initial startup, the Permittee shall submit to the Director an Operation and Maintenance (O&M) plan which provides adequate information to properly operate and maintain the equipment in good working order and establish baseline opacities. The O&M plan shall be incorporated into this permit through the appropriate permitting revision process and the Permittee shall adhere to the O&M plan during the permitting review process.

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

##### B. Monitoring, Recordkeeping and Reporting Requirements

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

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

2. The Permittee shall keep the O&M Plan on-site and available for review.

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

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

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

4. The most recent two years of records required to be kept by Condition XIII of "Attachment A" shall be kept on-site.

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

5. The Permittee shall maintain records of all emission-related maintenance activities performed and make them available to ADEQ upon request.

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

6. No later than 30 days after installation, or upon start-up, whichever is earlier, the Permittee shall provide the make, model and date of manufacture for such equipment as listed in Attachment "C".

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

C. Periodic Opacity Monitoring

1. Within 90 days of initial operation of the emission units identified as subject to this condition in Sections III and IV of this Attachment the Permittee shall conduct certified EPA Method 9 observations for the process sources subject to this condition while operating at normal representative working conditions, to establish a baseline opacity level. The Permittee shall include the determined baseline opacities in the O&M plan.  
[A.A.C. R18-2-306.A.3.c]
2. After the baseline opacity is established, a certified Method 9 observer shall conduct a bi-weekly (once every two weeks) visual survey of visible emissions from the process sources subject to this condition when they are in operation. The Permittee shall keep a record of the name of the observer, the date on which the observation was made, and the results of the observation.  
[A.A.C. R18-2-306.A.3.c]
3. If the observer sees a plume that on an instantaneous basis appears to exceed the baseline opacity level, then the observer shall take a six-minute EPA Method 9 observation of the plume.  
[A.A.C. R18-2-306.A.3.c]
4. If the six-minute opacity of the plume is less than the baseline opacity, the observer shall make a record of the following:
  - a. Location, date, and time of the observation; and
  - b. The results of the Method 9 observation.  
[A.A.C. R18-2-306.A.3.c]
5. If the six-minute opacity of the plume exceeds the baseline level but is less than the applicable opacity standard, the Permittee shall adjust or repair the controls or process equipment to reduce the observed opacity to or below the baseline opacity level. The observer shall make a record of the following:
  - a. Location, date, and time of the observation;
  - b. The results of the Method 9 observation;
  - c. Date and time when corrective action was taken; and
  - d. Type of corrective action taken.  
[A.A.C. R18-2-306.A.3.c]
6. If the six-minute opacity of the plume exceeds the applicable opacity standard, then the Permittee shall do the following:
  - a. Adjust or repair the controls or equipment to reduce opacity to or below the baseline level; and

- b. Report it as an excess emission for opacity.

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

7. If necessitated by the results of the bi-weekly monitoring, the Permittee may re-establish the baseline opacity level(s). Re-establishment of the baseline(s) shall be performed utilizing the same procedures used in setting up the initial baseline level(s). Within 30 days of re-establishing the baseline opacity, the Permittee shall report the results to the Director. The report shall also contain a description of the need for re-establishing the baseline(s).

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

### III. PROCESS OPERATIONS - Quarry Crushing, Conveying and Material Handling Operations

#### A. Applicability

The conditions of this Section apply to all emission units identified under the "Quarry Crushing, Conveying and Material Handling Operations" section of Attachment "C" of this permit.

#### B. Operating Limitations

##### 1. Production Limitations

- a. *The Permittee shall not operate any emission units identified in Section III.A in excess of 20 hours per day.*
- b. *The total material processed by the equipment identified in Section III.A shall not exceed 55,000 tons/day.*

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

[Material Permit Conditions are indicated by underline and italics]

##### 2. Monitoring and Recordkeeping

- a. *The Permittee shall install, calibrate, maintain and operate monitoring devices, which can be used to determine daily material throughput to individual process units.*

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

[Material Permit Conditions are indicated by underline and italics]

- b. The Permittee shall record the start-up and shut-down times of the equipment subject to this Section.

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

- c. The Permittee shall record the daily throughputs for equipment subject to this Section.

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

#### C. Particulate Matter (PM/PM<sub>10</sub>) and Opacity

1. Emission Limitations and Standards

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

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

[Material Permit Conditions are indicated by underline and italics]

2. Air Pollution Control Requirements

a. The Permittee shall, to the extent practicable, install, operate and maintain a combination dry fog and water spray dust suppression systems with wind barriers to control particulate emissions from the dump hoppers 10-HO-100 and 10-HO-200.

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

[Material Permit Conditions are indicated by underline and italics]

b. The Permittee shall, to the extent practicable, install, operate and maintain a dry fog dust suppression system with wind barriers to control particulate emissions from the discharge points associated with 10-AF-110, 10-AF-210, 10-SN-115, 10-SN-215, 10-CR-120 and 10-CR-220.

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

[Material Permit Conditions are indicated by underline and italics]

c. The Permittee shall, to the extent practicable, install, operate and maintain water sprays to control particulate emissions from the discharge points associated with transfer conveyors 10-CV-130, 10-CV-230, 10-CV-160 and 10-CV-260.

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

[Material Permit Conditions are indicated by underline and italics]

3. Monitoring, Record keeping and Reporting Requirements

a. The Permittee shall install, calibrate, operate and maintain a programmable control and alarm system for each dry fog dust suppression system. The system shall continuously monitor the water flow rate and supply pressure to the fogging nozzles.

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

[Material Permit Conditions are indicated by underline and italics]

b. Each programmable control monitor with alarm system must be certified by the manufacturer and must be calibrated on an annual basis in accordance with manufacturer's instructions.

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

c. All emission units shall comply with the monitoring requirements of Section II.C.

4. Testing Requirements for Particulate Matter and Opacity

- a. The Permittee shall determine initial compliance with the opacity standard in Condition III.C.1 as follows:

Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity from 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)]

- b. The Permittee shall conduct quarterly six-minute EPA Method 9 opacity observations on all emission units identified in Section III.A.

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

5. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with 40 CFR 60.382(b) and 386(b).

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

**IV. PROCESS OPERATIONS – Ore Reclaim, Concentration and Mill Material Handling Operations**

**A. Applicability**

The conditions of this Section apply to all emission units identified under the "Ore Reclaim, Mill Material Handling and Metal Concentrate Operations" section of Attachment "C" of this permit.

**B. Operating Limitations**

1. Production Limitations

- a. The total material processed by each reclaim belt feeder (15-BF-100, 15-BF-105, 15-BF-200 and 15-BF-205) shall not exceed 1,500 tons per hour.

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

[Material Permit Conditions are indicated by underline and italics]

- b. The amount of lime loaded into the lime bin (60-BN-100) shall not exceed 44 tons per hour.

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

[Material Permit Conditions are indicated by underline and italics]

- c. The amount of lime transferred to conveyor (60-CV-103) from the lime bin (60-BN-100) shall not exceed 250 tons per day.

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

[Material Permit Conditions are indicated by underline and italics]

- d. The total material processed in the Dry Solids Lab Equipment that vents to Dust Collector (10-DC-200) shall not exceed 200 pounds per hour.  
[A.A.C. R18-2-306.01 and -331.A.3.a]  
[Material Permit Conditions are indicated by underline and italics]
- e. The total material processed in the Molybdenum Concentrate Dryer (55-DY-130) shall not exceed 2.1 tons per hour.  
[A.A.C. R18-2-306.01 and -331.A.3.a]  
[Material Permit Conditions are indicated by underline and italics]
- f. The total material processed in the Molybdenum Concentrate Load Out System Dryer (55-ZM-140) shall not exceed 3.1 tons per hour.  
[A.A.C. R18-2-306.01 and -331.A.3.a]  
[Material Permit Conditions are indicated by underline and italics]

2. Monitoring and Recordkeeping

- a. The Permittee shall install, calibrate, maintain and operate monitoring devices, which can be used to determine hourly and daily material throughput to individual process units identified in Condition IV.B.1.  
[A.A.C. R18-2-306.A.3.c, -331.A.3.d and e]  
[Material Permit Conditions are indicated by underline and italics]
- b. The Permittee shall record the hourly and daily throughputs for equipment identified in Condition IV.B.1.  
[A.A.C. R18-2-306.A.3.c]

C. Particulate Matter (PM/PM<sub>10</sub>) and Opacity

1. Emission Limitations and Standards

- 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 an affected facility 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. The Permittee shall not allow the emissions from the common stack of 15-DC-170/171 or 15-DC-270/271 to exceed 2.1 pounds per hour of PM or 1.2 pounds per hour of PM<sub>10</sub>.  
[A.A.C. R18-2-306.01 and -331.A.3.a]  
[Material Permit Conditions are indicated by underline and italics]
- c. The Permittee shall not allow the emissions from the stack of 60-DC-100 to exceed 1.9 pounds per hour of PM or 1.3 pounds per hour of PM<sub>10</sub>.  
[A.A.C. R18-2-306.01 and -331.A.3.a]  
[Material Permit Conditions are indicated by underline and italics]
- d. The Permittee shall not allow the emissions from the stack of 10-DC-200 to exceed 0.000069 pounds per hour of PM or 0.000039 pounds per hour

of PM<sub>10</sub>.

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

[Material Permit Conditions are indicated by underline and italics]

- e. The Permittee shall not allow the emissions from the stack of 55-DC-170 to exceed 2.9 pounds per hour of PM or 2.5 pounds per hour of PM<sub>10</sub>.

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

[Material Permit Conditions are indicated by underline and italics]

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

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

[Material Permit Conditions are indicated by underline and italics]

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

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

[Material Permit Conditions are indicated by underline and italics]

## 2. Air Pollution Control Requirements

- a. The Permittee shall, to the extent practicable, install, operate and maintain dust collectors to control particulate emissions from 15-BF-100, 15-BF-105, 15-BF-200, 15-BF-205, 15-CV-110, 15-CV-210, 60-BN-100 and the dry solids lab.

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

[Material Permit Conditions are indicated by underline and italics]

- b. The Permittee install, operate and maintain a monitor to measure the pressure change across the filter media on each dust collector identified in Condition IV.C.2.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. The Permittee shall, to the extent practicable, install, operate and maintain a wet scrubber to control particulate emissions from molybdenum concentrate dryer unit 55-DY-130.

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

[Material Permit Conditions are indicated by underline and italics]

## 3. Monitoring, Recordkeeping and Reporting Requirements

- a. All emission units shall comply with the monitoring requirements of Section II.D.

b. Dust Collectors 15-DC-170, 15-DC-171, 15-DC-270 and 15-DC-271

- (1) The Permittee shall perform an annual inspection of each dust collector to verify suitable operational conditions in accordance with the O&M Plan.

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

- (2) The Permittee shall record the pressure drop (or gain) across the filter of each dust collector on a weekly basis. If the pressure drop (or gain) is in excess of that specified by O&M Plan or  $\pm 30\%$  of the average obtained during the most recent performance test, the Permittee shall report the results to the Director in accordance with Condition XIV of "Attachment A".

[A.A.C. R18-2-306.A.3 & A.5]

c. Venturi Scrubber 55-DC-170

- (1) The Permittee shall install, calibrate, operate and maintain a monitoring device for the continuous measurement of the change in pressure of the gas stream through the scrubber. The monitoring device must be certified by the manufacturer to be accurate within  $\pm 250$  pascals ( $\pm 1$  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]

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

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

[Material Permit Conditions are indicated by underline and italics]

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

[40 CFR 60.385(b)]

- (4) After the initial performance test of a wet scrubber, the owner or operator shall submit semiannual reports to the Director of occurrences when the measurements of the scrubber pressure loss (or gain) or liquid flow rate differ by more than  $\pm 30$  percent from the average obtained during the most recent performance test. These reports shall be submitted with the reports required

by Condition VII.A of Attachment "A".

[40 CFR 60.385(c)]

4. Testing Requirements

- a. No later than 180 days after initial start-up of the operations identified in Section III.A, the Permittee shall conduct performance tests for PM and PM<sub>10</sub> on each of the common stacks for the paired SAG mill feed conveyor dust collectors (15-DC-170/15-DC-171 or 15-DC-270/15-DC-271), 55-DC-170 and 60-DC-100. Additional tests on each stack as described, shall be conducted during the third and fifth years of the term of the permit.

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

- b. Performance testing shall be conducted using EPA Reference Methods 5 and 201A or 202.

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

5. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with 40 CFR 60.382(a), 382(b), 385(b), 385(c), 385(d), and 386(b).

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

**V. PROCESS OPERATIONS – Solvent Extraction and Electro-winning (SX/EW) Operations**

**A. Applicability**

The conditions of this Section apply to the solvent extraction tanks, electro-winning cells and MIBC storage tanks listed in "Attachment C" of this permit.

**B. Volatile Organic Compounds (VOCs) and Other Miscellaneous Emissions**

1. Emission Limitations and Standards

- a. The Permittee shall not cause or permit the emission of gaseous or odorous materials from equipment and operations associated with the SX/EW process in such quantities or concentrations as to cause air pollution.

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

- b. Materials including solvents or other volatile compounds, acids, and alkalis utilized in the SX/EW process shall be processed, stored, used, and transported in such a manner and by such means that they will not evaporate, leak, escape or otherwise be 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.

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

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

2. Air Pollution Control Requirements

- a. The Permittee shall, to the extent practicable, use a low vapor pressure diluent, or other effective means as approved by the Director, of controlling VOC emissions in the solvent extraction plant.

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

[Material Permit Conditions are indicated by underline and italics]

- b. The Permittee shall use at least one of the following in the electro-winning tankhouse:

- (1) Foam;
- (2) Blankets;
- (3) Surfactants;
- (4) Thermal retention balls; or
- (5) Other effective means of controlling sulfuric acid emissions, as approved by the Director.

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

[Material Permit Conditions are indicated by underline and italics]

3. Monitoring, Record keeping and Reporting Requirements

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

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

4. Permit Shield

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

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

**VI. PROCESS OPERATIONS - 4.0 MMBtu/hr Boiler**

**A. Applicability**

This Section applies to the 4.0 MMBtu/hr boiler identified in "Attachment C" of this permit.

**B. Operating Limitations**

The Permittee shall only use liquefied petroleum gas (LPG) as fuel for the operation of the boiler identified in Section A.

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

**C. Particulate Matter (PM/PM<sub>10</sub>) and Opacity**

1. Emission Limitations and Standards - Particulate Matter

The Permittee shall not allow or permit the emission of particulate matter, caused by the combustion of fuel, from any fuel-burning operation in excess of the amount calculated by the following equation:

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

Where:

E = The maximum allowable particulate emissions rate in pounds-mass per hour, and

Q = The heat input in million Btu per hour. For purposes of this condition, the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet.

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

2. Emission Limitations and Standards - Opacity

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

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

3. Monitoring, Record keeping and Reporting Requirements

a. A certified EPA Reference Method 9 observer shall conduct an annual survey of visible emissions emanating from the stack of the boiler when in operation. If the opacity of the emissions observed appears to exceed the standard, the observer shall conduct a certified EPA Reference Method 9 observation. The Permittee shall keep records of the initial survey and any EPA Reference Method 9 observations performed. These records shall include the emission point observed, location of observer, name of observer, date and time of observation, and the results of the observation. If the observation shows a Method 9 opacity reading in excess of 15%, the Permittee shall initiate appropriate corrective action to reduce the opacity below 15%. The Permittee shall keep a record of the corrective action performed.

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

b. The Permittee shall report all six-minute periods in which the opacity of

any plume or effluent exceeds 15 percent.

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

4. Permit Shield

Compliance with the terms of this Section shall be deemed compliance with the requirements of A.A.C. R18-2-702.C, A.A.C. R18-2-724.B, A.A.C. R18-2-724.C.1 and A.A.C. R18-2-724.J.

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

## VII. FUGITIVE DUST REQUIREMENTS

### A. Applicability

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

### B. Operating Limitations

1. Ore hauling operations shall be limited to 20 hours per day and shall not exceed a total of 90,000 vehicle miles per year.

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

[Material Permit Conditions are indicated by underline and italics]

2. The Permittee shall maintain a daily record of ore hauling hours of operation.

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

3. The Permittee shall maintain, and update monthly, a rolling annual sum of the combined total miles traveled by all haul trucks.

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

4. Ore blasting operations shall be limited to one blast event per day and a maximum of 9.3 tons ANFO per blast event.

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

[Material Permit Conditions are indicated by underline and italics]

5. The Permittee shall maintain records of the time, date and tons of ANFO used for each blast events.

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

### C. Particulate Matter (PM/PM<sub>10</sub>) and Opacity

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

a. Emission Limitations and Standards

- (1) Opacity of emissions from any fugitive dust non-point source shall not be greater than 40% measured in accordance with the Arizona Testing Manual, Reference Method 9.

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

(2) 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]

(3) The Permittee shall employ the following reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne:

(a) Keep dust and other types of air contaminants to a minimum in an open area where construction operations, repair operations, demolition activities, clearing operations, leveling operations, or any earth moving or excavating activities are taking place, by good modern practices such as using an approved dust suppressant or adhesive soil stabilizer, paving, covering, landscaping, continuous wetting, detouring, barring access, or other acceptable means;

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

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

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

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

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

(d) Take reasonable precautions, such as wetting, applying dust suppressants, or covering the load when transporting material likely to give rise to airborne dust;

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

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

[A.A.C. R18-2-606]

(f) Take reasonable precautions such as chemical stabilization, wetting, or covering when organic or inorganic dust producing material is being stacked,

piled, or otherwise stored;

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

- (g) Operate stacking and reclaiming machinery utilized at storage piles at all times with a minimum fall of material, or with the use of spray bars and wetting agents;

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

- (h) No person shall cause, suffer, allow, or permit construction of mineral tailing piles without 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]

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

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

b. Air Pollution Control Requirements

Haul Roads and Storage Piles:

*Water, or an equivalent control, shall be used to control visible emissions from haul roads and storage piles.*

[A.A.C. R-18-2-306.A.2 and -331.A.3.d]

[Material Permit Condition is indicated by underline and italics]

c. Monitoring and Recordkeeping Requirements

- (1) The Permittee shall maintain records of the dates on which any of the activities listed in Conditions VII.C.1.a(3)(a) through VII.C.1.a(3)(h) above were performed and the control measures that were adopted.

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

(2) Opacity Monitoring Requirements

- (a) A certified Method 9 observer shall conduct a twice per week visual survey of visible emissions from the fugitive dust sources. The Permittee shall keep a record of the name of the observer, the date and location on which the observation was made, and the results of the observation.
- (b) If the observer sees a visible emission from a fugitive dust source that on an instantaneous basis appears to

exceed the applicable opacity standard, then the observer shall, if practicable, take a six-minute Method 9 observation of the plume.

- i. If the six-minute opacity of the visible emission is less than or equal to the applicable opacity standard, the observer shall make a record of the following:
  - a) Location, date, and time of the observation; and
  - b) The results of the Method 9 observation.
- ii. If the six-minute opacity of the visible emission exceeds the applicable opacity standard, then the Permittee shall do the following:
  - a) Adjust or repair the controls or equipment to reduce opacity to below the applicable opacity standard; and
  - b) Report it as an excess emission under Section XII.A of Attachment "A".

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

d. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with A.A.C. R18-2-604.A, A.A.C. R18-2-604.B, A.A.C. R18-2-605, A.A.C. R18-2-606, A.A.C. R18-2-607, A.A.C. R18-2-614 and A.A.C. R18-2-702.B.

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

2. Open Burning

a. Emission Limitations and Standards

Except as provided in A.A.C. R18-2-602.C(1), C(3), and C(4), and except when permitted to do so by either ADEQ or the local officer delegated the authority for issuance of open burning permits, the Permittee shall not conduct open burning.

[A.A.C. R18-2-602]

b. Monitoring and Recordkeeping Requirement

Compliance with the requirements of Condition VI.B.2.a above may be demonstrated by maintaining copies of all open burning permits on file.

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

c. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with the requirements of A.A.C. R18-2-602.

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

**VIII. COMPRESSION IGNITION INTERNAL COMBUSTION ENGINES – NOT SUBJECT TO NSPS**

**A. Applicability**

The conditions of this Section apply to the emergency generator identified as 00-DC-102 under the “Internal Combustion Engines” section of Attachment “C”.

**B. Operating Limitations**

1. *The Permittee shall limit the hours of operation for the internal combustion engine to one hour per day and 100 hours per year, on a rolling twelve month total, except for emergency use.*

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

[Material permit conditions are indicated by underline and italics]

2. Fuel Limitations

The Permittee shall only fire low sulfur diesel fuel (less than 0.9 percent by weight of sulfur) fuel in the internal combustion engine.

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

3. Monitoring and Recordkeeping

The Permittee shall keep records of daily and monthly totals of all hours of operation of the engine. At the end of each month, the Permittee shall calculate and record a rolling twelve month total of the hours of operation. Hours of operation when an engine is in emergency use shall be noted as such and may be deducted from the calculation of the rolling twelve month total.

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

4. Permit Shield

Compliance with this Part shall be deemed compliance with A.A.C. R18-2-719.H.

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

**C. Particulate Matter and Opacity**

1. Emissions Limitations and Standards

- a. For purposes of this Section, the heat input shall be the aggregate heat

content of all fuels whose products of combustion pass through a stack or other outlet. The total heat input of all operating fuel-burning units on a plant or premises shall be used for determining the maximum allowable amount of particulate matter which may be emitted.

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

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

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

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

Where

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

Q = the heat input in million Btu per hour

- c. Opacity

- i. The Permittee shall not cause, allow or permit to be emitted into the atmosphere from any stationary rotating machinery, smoke for any period greater than 10 consecutive seconds which exceeds 40% opacity.

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

- ii. Visible emissions when starting cold equipment shall be exempt from this requirement for the first 10 minutes.

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

## 2. Monitoring, Reporting, and Recordkeeping

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

- a. The Permittee shall keep records of fuel supplier certifications. The certification shall contain information regarding the name of fuel supplier and lower heating value of the fuel. These records shall be made available to ADEQ upon request.

- b. A certified EPA Reference Method 9 observer shall conduct a monthly survey of visible emissions emanating from the stack of the IC engine if in operation. If the opacity of the emissions observed appears to exceed the standard, the observer shall conduct a certified EPA Reference Method 9 observation. The Permittee shall keep records of the initial survey and any EPA Reference Method 9 observations performed. These records shall include the emission point observed, name of

observer, date and time of observation, and the results of the observation.

- c. If the observation results in a Method 9 opacity reading in excess of 40%, the Permittee shall report this to ADEQ as excess emission and initiate appropriate corrective action to reduce the opacity below 40%. The Permittee shall keep a record of the corrective action performed.

3. Testing Requirements

The Permittee shall conduct performance tests as may be required by the Director.

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

4. Permit Shield

Compliance with this Part shall be deemed compliance with A.A.C. R18-2-719.C.1 and A.A.C. R18-2-719.E.

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

**D. Sulfur Dioxide**

1. Emission Limitations and Standards

The Permittee shall not emit or cause to emit more than 1.0 pound of sulfur dioxide per million Btu.

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

2. Monitoring, Recordkeeping, and Reporting

- a. The Permittee shall keep daily records of the sulfur content and lower heating value of the fuel being fired in the machine. The Permittee shall keep records of fuel supplier certifications to demonstrate compliance with the sulfur content limit specified in this Condition III.B.2. The certification shall contain the sulfur content of the fuel and the method used to determine the sulfur content of the fuel. These records shall be made available to ADEQ upon request.

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

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

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

3. Permit Shield

Compliance with this Part shall be deemed compliance with A.A.C. R18-2-719.F, A.A.C. R18-2-719.I, and A.A.C. R18-2-719.J.

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

**IX. COMPRESSION IGNITION INTERNAL COMBUSTION ENGINES - SUBJECT TO NSPS**

**A. Applicability**

The conditions of this Section apply to the emergency generator identified as 00-DC-101 under the "Internal Combustion Engines" section of Attachment "C".

**B. Operating Requirements**

**1. General**

a. The Permittee shall install and configure the engine according to the manufacturer's specifications.

[40 CFR 60.4211(c)]

a. The Permittee shall operate and maintain the engine according to the manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer. A copy of the instructions or procedures shall be kept onsite and made available to ADEQ upon request.

[40 CFR 60.4211(a) and A.A.C. R18-2-306.A.3]

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

[40 CFR 60.4211(a)]

c. The Permittee shall operate and maintain the internal combustion engine according to the manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer over the entire life of the engine.

[40 CFR 60.4206]

**2. Hours Limitations**

[40 CFR 60.4211(e), 60.4209(a), A.A.C. R18-2-306.A.3.c, and -306.A.4]

a. Emergency internal combustion engines 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.

b. The Permittee shall not operate the emergency engine for the purposes of maintenance checks and readiness testing for more than 100 hours per year unless the Permittee maintains records identifying the Federal, State, or local standards that require maintenance and testing of emergency internal combustion engines beyond 100 hours per year. Copies of such records shall be provided to ADEQ upon request.

c. The Permittee 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 Permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per year.

- d. The Permittee shall not operate emergency engines except for emergency purposes, and maintenance and testing. There is no time limit on the use of the engine in emergency situations.

### 3. Fuel Limitations

#### a. Fuel Requirements

- (1). After October 1, 2007, an engine that uses diesel fuel, shall use diesel fuel that meets the following requirements of 40 CFR 80.510(a):

- (a). Sulfur content: 500 parts per million (ppm) maximum; and
- (b). A minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.

[40 CFR 60.4207(a)]

- (2). After October 1, 2010, an engine that uses diesel fuel and has a displacement of less than 30 liters per cylinder, shall use diesel fuel that meets the following requirements of 40 CFR 80.510(b):

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

[40 CFR 60.4207(b)]

### 4. Monitoring/ Record keeping/Reporting Requirements

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

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

[Material permit conditions are indicated by underline and italics]

- b. The Permittee shall maintain monthly records of engine operation. The records shall include the purpose of operation and the duration of time the engine was operated. The record shall identify whenever the operation of the engine was for emergency purposes.

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

## C. Emission Limitations and Standards

### 1. Particulate Matter

Exhaust emissions of particulate matter shall not exceed 0.2 g/kWh, (0.242 lb/hr).

[40 CFR 60.4205(b), and 60.4202(a)(2)]

2. Opacity

Opacity shall not exceed:

- a. 20% during the acceleration mode;
- b. 15% during the lugging mode; and
- c. 50% during the peaks in either the acceleration or lugging modes.

[40 CFR 60.4205(b), and 60.4202(a)(2)]

3. Nonmethane Hydrocarbons and Nitrogen Oxides

Exhaust emissions of nonmethane hydrocarbons and nitrogen oxides shall not exceed 4.0 g/kWhr, (4.84 lb/hr).

[40 CFR 60.4205(b), and 60.4202(a)(2)]

4. Carbon Monoxide

Exhaust emissions of carbon monoxide shall not exceed 3.5 g/kWh, (4.21 lb/hr).

[40 CFR 60.4205(b), and 60.4202(a)(2)]

**D. Monitoring and Record keeping**

1. The Permittee shall comply with the emissions standards specified in Condition IX.C.1 through IX.C.4 by purchasing an engine certified to those standards, and following the requirements of Condition IX.B.1 through IX.B.3

[40 CFR 60.4211(a) and (c)]

2. The Permittee shall maintain a copy of engine certifications or other documentation demonstrating the engine complies with the applicable standards in this permit, and shall make the documentation available to ADEQ upon request.

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

**E. Testing Requirements**

1. The Permittee shall conduct performance tests as may be required by the Director.

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

2. Performance tests shall be conducted according to 40 CFR 60.4212.

[40 CFR 60.4212]

**F. Permit Shield**

Compliance with this Part shall be deemed compliance with 40 CFR 60.4202(a)(2), 60.4205(b), 60.4206, 60.4207(a) and (b), 60.4209(a), and 60.4211 (a), (c) and (e).

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

**X. GASOLINE STORAGE TANKS**

**A. Standards and Limitations**

1. All gasoline storage tanks shall be equipped with a submerged filling device, or acceptable equivalent, for the control of hydrocarbon emissions. [A.A.C. R18-2-710.B]
2. 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]
3. The Permittee shall install, operate and maintain gasoline storage tanks in accordance with manufacturer's specifications. [A.A.C. R18-2-306.A.2 and -331.A.3.e]  
[Material Permit Conditions are indicated by underline and italics]

**B. Monitoring and Recordkeeping Requirements**

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

The Permittee shall maintain a storage tank log showing the following:

1. The Permittee shall maintain a file of each type of petroleum liquid stored, the typical Reid vapor pressure of the petroleum liquid stored and the dates of storage. Dates on which the storage vessel is empty shall be shown.
2. The Permittee shall determine and record the average monthly storage temperature and true vapor pressure of the petroleum liquid stored at such temperature if either:
  - a. The petroleum liquid has a true vapor pressure, as stored, greater than 26 mm Hg (0.5 psia) but less than 78 mm Hg (1.5 psia) and is stored in a storage vessel other than one equipped with a floating roof, a vapor recovery system or their equivalents; or
  - b. The petroleum liquid has a true vapor pressure, as stored, greater than 470 mm Hg (9.1 psia) and is stored in a storage vessel other than one equipped with a vapor recovery system or its equivalent.
3. 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 temperatures determined at least once every

seven days.

4. 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.

C. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-710.B, D and E.

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

## XI. GASOLINE DISPENSING FACILITIES

A. Applicability

1. This Section applies to each gasoline dispensing facility (GDF) that is located at the source. The affected source includes each gasoline cargo tank during the delivery of product to a GDF and also includes each storage tank.

[40 CFR 63.1111(a)]

2. This Section applies to gasoline storage tanks and associated equipment components in vapor or liquid gasoline service at new, reconstructed, or existing gasoline dispensing facilities located at an area source. Pressure/Vacuum vents on gasoline storage tanks and the equipment necessary to unload product from cargo tanks into the storage tanks at GDF are covered emission sources. The equipment used for the refueling of motor vehicles is not covered by this Section.

[40 CFR 63.1112(a)]

3. The Permittee shall comply with the standards in this Section no later than January 10, 2011.

[40 CFR 63.1113(b)]

4. *The Permittee shall not allow the throughput of gasoline to exceed 10,000 gallons per month.*

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

[Material permit conditions are indicated by underline and italics]

5. The equipment associated with this Section is subject to the NESHAP General Provisions, as described in Table 3 to 40 CFR 63 Subpart CCCCCC.

**B. Emission Standards**

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

[40 CFR 63.11116(a)]

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

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

[40 CFR 63.11116(b)]

3. The Permittee shall comply with the requirements of this Section by the applicable dates specified in Conditions X.A.3.

[40 CFR 63.11116(c)]

**C. Recordkeeping Requirements**

The Permittee shall maintain a monthly log of the throughput of the storage tank.

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

**D. Permit Shield**

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

Compliance with Section X shall be deemed compliance with 40 CFR 63.11111(a), 40 CFR 63.11112(a), 40 CFR 63.11113(b), 40 CFR 63.11130, 40 CFR 63.11116(a), 40 CFR 63.11116(b), and 40 CFR 63.11116(c).

**XII. 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 are agricultural equipment used in normal farm operations. Mobile sources shall not include portable sources as defined in A.A.C. R18-2-101.90.

**B. Particulate Matter (PM/PM<sub>10</sub>) and Opacity**

1. Emission Limitations and Standards

a. Off-Road Machinery

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

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

b. Roadway and Site Cleaning Machinery

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

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

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

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

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

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

2. Recordkeeping Requirement

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

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

3. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with

the requirements of A.A.C. R18-2-801, A.A.C. R18-2-802.A, A.A.C. R18-2-804.A and A.A.C. R18- 2-804.B. [A.A.C. R18-2-325]

### **XIII. OTHER PERIODIC ACTIVITY REQUIREMENTS**

#### **A. Abrasive Blasting**

##### Particulate Matter and Opacity

##### 1. Emission Limitations and Standards

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

- (1) wet blasting;
- (2) effective enclosures with necessary dust collecting equipment; or
- (3) any other method approved by the Director.

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

##### b. Opacity

The Permittee shall not cause, allow or permit visible emissions from sandblasting or other abrasive blasting operations in excess of 20% opacity, as measured by EPA Reference Method 9.

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

##### 2. Monitoring and Recordkeeping Requirement

Each time an abrasive blasting project is conducted, the Permittee shall log in ink or in an electronic format, 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 Part shall be deemed compliance with A.A.C. R18-2-726, A.A.C. R18-2-702.B.

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

**B. Use of Paints**

1. Volatile Organic Compounds

a. Emission Limitations and Standards

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

(1) The Permittee shall not conduct or cause to be conducted any spray painting operation without minimizing organic solvent emissions. Such operations, other than architectural coating and spot painting, shall be conducted in an enclosed area equipped with controls containing no less than 96 percent of the overspray.  
[A.A.C.R18-2-727.A]

(2) The Permittee or their designated contractor shall not either:

(a) Employ, apply, evaporate, or dry any architectural coating containing photochemically reactive solvents for industrial or commercial purposes; or

(b) Thin or dilute any architectural coating with a photochemically reactive solvent.  
[A.A.C.R18-2-727.B]

(3) For the purposes of Condition XII.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 XII.B.1.a.(3)(a) through XII.B.1.a.(3)(c) below, 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 XII.B.1.a.(3)(a) through XII.B.1.a.(3)(c) above, it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents.

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

b. Monitoring and Recordkeeping Requirements

- (1) Each time a spray painting project is conducted, the Permittee shall log in ink, or in an electronic format, a record of the following:
- (a) The date the project was conducted;
  - (b) The duration of the project;
  - (c) Type of control measures employed;
  - (d) Material Safety Data Sheets for all paints and solvents used in the project; and
  - (e) The amount of paint consumed during the project.
- (2) Architectural coating and spot painting projects shall be exempt from the recordkeeping requirements of Condition XII.B.1.b.(1) above.

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

c. Permit Shield

Compliance with this Part 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, as measured by EPA Reference Method 9.

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

b. Permit Shield

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

**C. Asbestos - Hazardous Air Pollutants**

1. Emission Limitations and Standards

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

[A.A.C. R18-2-1101.A.8]

2. Monitoring and Recordkeeping Requirement

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

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

3. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-1101.A.8.

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

**ATTACHMENT "C": EQUIPMENT LIST**  
**Air Quality Control Permit No. 44232**  
**For**  
**Mineral Park, Inc.**

<b>EQUIPMENT TYPE (ID)</b>	<b>MAX. CAPACITY*</b>	<b>MAKE</b>	<b>MODEL</b>	<b>SERIAL NUMBER</b>	<b>DATE OF MFG.</b>
<b>Solvent Extraction (SX) and Electro-winning (EW) Operations: SX/EW Operations</b>					
LPG Boiler (100)	4 MMBtu/hr	Raypeck, Inc.	H3-4001A-CDCRCDA	115456	1990
Solvent Extraction Tanks (300)	4 Tanks	Custom Fabrication	Custom Fabrication	Unknown	1990
Electro-winning Cells (400)	60 Cells	Custom Fabrication	Custom Fabrication	Unknown	1990
<b>Quarry Crushing, Conveying and Material Handling Operations</b>					
Dry Fogging Suppression System (10-BV-170)	N/A	Dust Solutions, Inc.	07-0722	Custom Fabrication	2008
Dump Hopper (10-HO-100)	150 tons	Terra Nova Technologies	Custom Fabrication	Custom Fabrication	March 2008
Dump Hopper (10-HO-200)	150 tons	TBD – Phase 2	TBD – Phase 2	TBD – Phase 2	TBD – Phase 2
Apron Feeder (10-AF-110)	2,500 tons/hr (4,000 tph nameplate)	Stephens-Adamson	72-29	15491	unknown (used)
Apron Feeder (10-AF-210)	2,500 tons/hr (4,000 tph nameplate)	Stephens-Adamson Clone	Custom Fabrication	Custom Fabrication	TBD – Phase 2
Vibrating Grizzly (10-SN-115)	3,250 tons/hr (4,000 tph nameplate)	Terex/ Simplicity	HS160DC	1618-HS160DC-2624	2008
Vibrating Grizzly (10-SN-215)	3,250 tons/hr (4,000 tph nameplate)	Terex/ Simplicity	TBD – Phase 2	TBD – Phase 2	TBD – Phase 2
Double Toggle Jaw Crusher (10-CR-120)	1,691 tons/hr (3,000 tph nameplate)	Fuller Traylor	56-72	70-20619-721	unknown (used)
Double Toggle Jaw Crusher (10-CR-220)	1,691 tons/hr (3,000 tph nameplate)	Birdsboro	TBD – Phase 2	TBD – Phase 2	TBD – Phase 2
Primary Crusher Discharge Conveyer (10-CV-130)	3,500 tons/hr (4,000 tph nameplate)	Terra Nova Technologies	Custom Fabrication	Custom Fabrication	March 2008
Primary Crusher Discharge Conveyer (10-CV-230)	3,500 tons/hr (4,000 tph nameplate)	TBD – Phase 2	Custom Fabrication	Custom Fabrication	TBD – Phase 2
Combined Transfer Conveyer and Fixed Stacker (10-CV-160)	3,500 tons/hr (4,000 tph nameplate)	Terra Nova Technologies	Custom Fabrication	Custom Fabrication	March 2008

<b>EQUIPMENT TYPE (ID)</b>	<b>MAX. CAPACITY*</b>	<b>MAKE</b>	<b>MODEL</b>	<b>SERIAL NUMBER</b>	<b>DATE OF MFG.</b>
Combined Transfer Conveyor and Fixed Stacker (10-CV-260)	3,500 tons/hr (4,000 tph nameplate)	TBD – Phase 2	TBD – Phase 2	TBD – Phase 2	TBD – Phase 2
<b>Ore Reclaim, Metal Concentration and Mill Material Handling Operations</b>					
Coarse Ore Reclaim Belt Feeder (15-BF-100)	1,500 tons/hr (2,313 tph nameplate)	Terra Nova Technologies	Custom Fabrication	Custom Fabrication	March 2008
Coarse Ore Reclaim Belt Feeder (15-BF-105)	1,500 tons/hr (2,313 tph nameplate)	Terra Nova Technologies	Custom Fabrication	Custom Fabrication	March 2008
Coarse Ore Reclaim Belt Feeder (15-BF-200)	1,500 tons/hr (2,313 tph nameplate)	Terra Nova Technologies	Custom Fabrication	Custom Fabrication	TBD – Phase 2
Coarse Ore Reclaim Belt Feeder (15-BF-205)	1,500 tons/hr (2,313 tph nameplate)	Terra Nova Technologies	Custom Fabrication	Custom Fabrication	TBD – Phase 2
SAG Feed Conveyor (15-CV-110)	2,313 tons/hr	Terra Nova Technologies	Custom Fabrication	Custom Fabrication	March 2008
SAG Feed Conveyor (15-CV-210)	2,313 tons/hr	Terra Nova Technologies	Custom Fabrication	Custom Fabrication	TBD – Phase 2
SAG Feed Reclaim Belt Dust Collector (15-DC-170)	4,000 ACFM	Dust Solutions, Inc.	DFT3-12	2488955-1 Unit 4	2008
SAG Feed Reclaim Belt Dust Collector (15-DC-171)	4,000 ACFM	Dust Solutions, Inc.	DFT3-12	2488959-1 Unit 1	2008
SAG Feed Reclaim Belt Dust Collector (15-DC-270)	TBD – Phase 2	TBD – Phase 2	TBD – Phase 2	TBD – Phase 2	TBD – Phase 2
SAG Feed Reclaim Belt Dust Collector (15-DC-271)	TBD – Phase 2	TBD – Phase 2	TBD – Phase 2	TBD – Phase 2	TBD – Phase 2
Lime Bin (60-BN-100)	380 tons	Tank Connection	07-0403	07-0403	2008
Lime Screw Conveyor (60-CV-103) **	10 tons/hr	Tank Connection	Custom Fabrication	Custom Fabrication	2008
Lime Bin Dust Collector (60-DC-100)	4,900 ACFM	MAC	Style II Filter	121494-001	2008
Dry Solids Lab with Dust Collector (10-DC-200)	5,200 CFM	NR Murphy	HEC-36-12	7085	2008
Copper Concentrate Filter Cake Conveyor (50-CV-120) **	35 tons/hr (6.5% moisture)	Superior	Custom Fabrication	Custom Fabrication	2008

EQUIPMENT TYPE (ID)	MAX. CAPACITY*	MAKE	MODEL	SERIAL NUMBER	DATE OF MFG.
Copper Concentrate Storage (50-SB-150) **	2,100 tons	Superior	Custom Fabrication	Custom Fabrication	2008
Molybdenum Concentrate Screw Transfer Conveyer (55-CV-120) **	3.2 tons/hr (15% moisture)	WAM	SCM12C4S5Y3S 8x13	30004492	unknown (used)
Molybdenum Concentrate Electric Dryer (55-DY-130)	3.1 tons/hr	Holo-Flite Dryer	D1218-5	15322-001-1	2008
Molybdenum Concentrate Load Out System (55-ZM-140) **	3.1 tons/hr	Hapman Bulk Bag Filler Unit	Hapman	H11478-AB	2008
Electric Oil Heater (55-HE-175) **	57.3 gal/min	HEAT	SL550-700-RS-463	086473/A	2008
Molybdenum Dryer Wet Scrubber (55-DC-170)	500 ACFM	Filter Technologies	500 ACFM Venturi Scrubber	360-12-10-07	2008
<b>Internal Combustion Engines</b>					
Fire Water Emergency Generator (00-DG-101)	732 bhp	PRAMAC	GSW560V	PECS50002867	2007
Water Pump Emergency Generator (00-DG-102)	226 bhp	GENERAC	3082470100	2071795	2003
<b>Storage Tanks</b>					
T-1 Unleaded Gasoline	5,000 gallons				
60-TK-150 Methyl isobutyl carbitol	9,400 gallons	BMT	Custom Fabrication	Custom Fabrication	2008
60-TK-155 Methyl isobutyl carbitol	2,000 gallons	BMT	Custom Fabrication	Custom Fabrication	2008
60-TK-156 Methyl isobutyl carbitol	1,500 gallons	BMT	Custom Fabrication	Custom Fabrication	2008

\* Nameplate capacity for an individual piece of equipment may vary from design and actual throughput.

\*\* Not emission units. Included for completeness.