

**PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR PROGRAM**

33 N. Stone Avenue, Suite 700 • Tucson, Arizona 85701 • Phone: (520) 724-7400

AIR QUALITY OPERATING PERMIT

(As required by Title 17.12, Article II, Pima County Code)

ISSUED TO

**ASARCO LLC – (MISSION COMPLEX)
4201 W. PIMA MINE ROAD
SAHUARITA, ARIZONA 85629**

This air quality operating permit does not relieve applicant of responsibility for meeting all air pollution regulations

THIS PERMIT ISSUED SUBJECT TO THE FOLLOWING: **Conditions contained in Parts A and B AND Attachments 1 and 2.**

PERMIT NUMBER **2026**

PERMIT CLASS **I**

ISSUED: **APRIL 19, 2013**

EXPIRES: **APRIL 18, 2018**



SIGNATURE

Mukonde Chama, P.E., Air Permits Manager, PDEQ

TITLE

SUMMARY

This air quality operating permit is issued to ASARCO LLC for its Mission Complex (herein known as the “facility”) which is located on Pima Mine Road, Sahuarita, Arizona. The facility operates an open-pit copper mine and two concentrators where the ore is mined, crushed, ground and concentrated using froth flotation techniques. The facility also operates a by-products molybdenum plant. Emissions from the facility consist primarily of fugitive and non-fugitive particulate matter (PM) from mining and concentration operations, nitrogen oxide and carbon monoxide from portable and stationary combustion sources and volatile organic compounds from organic liquid storage activities.

The facility controls fugitive particulate matter by a combination of methods including, but not limited to, retention of native vegetation, application of dust and erosion chemical suppressants, road watering, use of wet scrubbers and baghouses. The facility has also compliance assurance monitoring (CAM) plans for several pollution specific emission units. The CAM plans are designed to provide reasonable assurance of compliance with applicable requirements under the clean air act.

This Air Quality Permit is only applicable to activities located outside of the San Xavier Indian Reservation and does not include Tailing Dams #1, #2, or #3 (See Site and Visual Observation Map in Attachment 3).

The facility operates 24 hours per day, 365 days per year except during routine maintenance, shutdown or repair of equipment.

The following facility wide emissions are for informational purposes only and are used to establish the “baseline” emissions for the source. They are not intended to be enforceable emission limits unless otherwise noted in Part B of this permit.

The emission rates were obtained from information contained in the renewal application submitted December 13, 2007.

Emission Source	Pollutant (tons/yr)							
	PM	PM ₁₀	PM _{2.5}	NO _x	SO ₂	CO	VOC	HAP _s (Total)
Facility Wide Emissions	7512.9	3639.9	532.3	221.0	55.0	367.7	7.7	2.6

Detailed calculations of these emissions are provided in Section 7 of the December 2007 permit application and amended in subsequent revisions to the renewal permit application and the South Mill Expansion operations. Based on these estimates, the facility is a Class I, ‘major source’ for particulate matter, particulate matter less than ten microns, particulate matter less than two point five microns, nitrogen oxide and a true minor for all other pollutants.

All terms and conditions of this permit are Federally Enforceable by the Administrator of the United States Environmental Protection Agency (U.S.EPA) under the Clean Air Act, except as otherwise noted.

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PART A: GENERAL PROVISIONS

(References to A.R.S. are references to the Arizona Revised Statutes, references to A.A.C. are references to the Arizona Administrative Code, and references to PCC are references to Title 17 of the Pima County Code)

I. PERMIT EXPIRATION AND RENEWAL

[PCC 17.12.180.A.1 and PCC 17.12.160.D.1]

- A. This permit is valid for a period of five years from the date of issuance of the permit.
- B. The Permittee shall submit an application for renewal of this permit at least 6 months, but not greater than 18 months prior to the date of permit expiration.

II. COMPLIANCE WITH PERMIT CONDITIONS

[PCC 17.12.180.A.8.a and b]

- A. The Permittee shall comply with all conditions of this permit including all applicable requirements of Arizona air quality statutes A.R.S. Title 49, Chapter 3, and Pima County air quality rules. Any permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. In addition, noncompliance with any federally enforceable requirement constitutes a violation of the Clean Air Act.
- B. It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

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

[PCC 17.12.180.A.8.c and PCC 17.12.270]

- 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, or 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. Additional applicable requirements under the Clean Air Act become applicable to a major source with a remaining permit term of three or more years. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to PCC 17.12.280.B. Any permit reopening required pursuant to this paragraph shall comply with provisions in PCC 17.12.280 for permit renewal and shall reset the five-year permit term.
 - 2. Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Control Officer, excess emissions offset plans shall be deemed to be incorporated into the Class I permit.
 - 3. The Control Officer 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.
 - 4. The Control Officer or the Administrator determines that the permit needs to be revised or revoked to assure compliance with the applicable requirements.

- C. Proceedings to reopen and issue a permit, including appeal of any final action relating to a permit reopening, shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopenings shall be made as expeditiously as practicable. Permit reopenings for reasons other than those stated in paragraph III.B.1 of Part A shall not result in the resetting of the five-year permit term.

IV. POSTING OF PERMIT

[PCC 17.12.080]

The Permittee who has been granted an operating permit or an Authorization to Operate (ATO) by PDEQ shall maintain a complete copy of the operating permit and ATO onsite. If it is not feasible to maintain a copy of the operating permit or ATO onsite, the Permittee may request, in writing, to maintain a copy of the permit at an alternate location. Upon written approval by the Control Officer, the Permittee must maintain a complete copy of the permit at the approved alternative location.

V. FEE PAYMENT

[PCC 17.12.180.A.9 and PCC 17.12.510]

The Permittee shall pay fees to the Control Officer pursuant to PCC 17.12.510.

VI. ANNUAL EMISSIONS INVENTORY QUESTIONNAIRE

[PCC 17.12.320]

- A. When requested by the Control Officer, the Permittee shall complete and submit an annual emissions inventory questionnaire. The questionnaire is due by March 31 or ninety days after the Control Officer makes the inventory form available, whichever occurs later, and shall include emission information for the previous calendar year. These requirements apply whether or not a permit has been issued and whether or not a permit application has been filed.
- B. The questionnaire shall be on a form provided by or approved by the control officer and shall include the information required by PCC 17.12.320.

VII. COMPLIANCE CERTIFICATION

[PCC 17.12.220.A.2]

The Permittee shall submit to the Control Officer a compliance certification that describes the compliance status of the source with respect to each permit condition. Certifications shall be submitted as specified in Part B of this permit.

- A. The compliance certification shall include the following:
1. Identification of each term or condition contained in the permit including emission limitations, standards, work practice, or management practices that are the basis of the certification.
 2. Identification of the method(s) or other means used by the Permittee for determining the compliance status of the source with each term and condition during the certification period. Such methods and other means shall include, at a minimum, the methods and means required under PCC 17.12.180 (A)(3), (monitoring including the related recordkeeping and reporting requirements that verify compliance with the monitoring). If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with Section 113(c)(2) of the Clean Air Act, which prohibits knowingly making a false certification or omitting material information.

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 identify each deviation and take it into account in the compliance certification.
 4. For emission units subject to 40 CFR 64, the certification shall also identify as possible exceptions to compliance any period during which compliance is required and in which an excursion or exceedance defined under 40 CFR 64 occurred.
 5. A progress report on all outstanding compliance schedules submitted pursuant to PCC 17.12.220; and
 6. Other facts the Control Officer may require to determine the compliance status of the facility.
- B. A copy of all compliance certifications for Class I permits shall also be submitted to the EPA Administrator. The address for the EPA Administrator is:

EPA Region 9 Enforcement Office, 75 Hawthorne St (Air-5), San Francisco, CA 94105

VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS [PCC 17.12.220.A.3]

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 and any other certification required by this permit 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 [PCC 17.12.220.A.4]

The Permittee shall allow the Control Officer or the authorized representative of the Control Officer upon presentation of proper credentials to:

- A. Enter upon the Permittee's premises where a source is located or 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

[PCC 17.12.160.D.3]

If this source becomes subject to a standard promulgated by the Administrator pursuant to Section 112(d) of the Clean Air Act (Hazardous Air Pollutants), 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. EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCY REPORTING

[PCC 17.12.040]

A. Excess Emissions Reporting

[PCC 17.12.040]

1. Excess emissions shall be reported as follows:

- a. The Permittee shall report to the Control Officer any emissions in excess of the limits established by this permit. The report shall be in 2 parts as specified below:
 - i. Notification by telephone or facsimile within 24 hours of the time the Permittee first learned of the occurrence of excess emissions that includes all available information from PCC 17.12.040.B. The number to call to report excess emissions is **520-243-7400**. The facsimile number to report excess emissions is **520-838-7432**.
 - ii. Detailed written notification by submission of an excess emissions report within 72 hours of the notification under XI.A.1.a.i of Part A. Notifications should be sent to:
PDEQ Air Program 33 N. Stone Avenue, Suite 700, Tucson, Arizona 85701.
- b. The excess emission report shall contain the following information:
 - i. The identity of each stack or other emission point where the excess emission occurred;
 - ii. The 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. The time and duration or expected duration of the excess emissions;
 - iv. The identity of the equipment from which the excess emissions emanated;
 - v. The nature and cause of the emissions;
 - vi. The steps taken, if the excess emissions were the result of a malfunction, to remedy the malfunction and the steps taken or planned to prevent the recurrence of the malfunctions; and
 - vii. The steps that were or are being taken to limit the excess emissions; If the source's permit contains procedures governing source operation during periods of startup or malfunction and the excess emissions resulted from startup or malfunction, 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 the 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 XI.A.1.a and b of Part A.

B. Permit Deviations Reporting

[PCC 17.12.180.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. Notice in accordance with PCC 17.12.180.E.3.d shall be considered prompt for purposes of this permit.

C. Emergency Provision

[PCC 17.12.180.E]

1. An "Emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, that require immediate corrective action to restore normal operation and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emission attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the conditions of PCC 17.12.180.E.3 are 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 or causes of the emergency;
 - b. At the time of the emergency, the permitted facility was being properly operated;
 - c. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. The Permittee submitted notice of the emergency to the Control Officer by certified mail, hand delivery, or facsimile transmission 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 § 49-480.F.3 and 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 Control Officer 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.

[PCC 17.12.035]

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 Clean Air 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. E.P.A., or
- d. Included in a permit to meet the requirements of PCC 17.16.590.A.5.

2. Affirmative Defense for Malfunctions

Emissions in excess of an applicable emission limitation due to malfunction shall constitute a violation. The Permittee of a source with emissions in excess of an applicable emission limitation due to malfunction 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 owner or operator of the source has complied with the reporting requirements of XIII.B of this Part 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 operator;
- 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 owner or operator 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 PCC Chapter 17.08 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 XI.E.3.b of Part A, 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. The Permittee of a source with emissions in excess of an applicable emission limitation due to startup and shutdown 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 owner or operator of the source has complied with the reporting requirements of XIII.B of Part A 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 source's 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 PCC Chapter 17.08 that could be attributed to the emitting source;
 - vii. All emissions monitoring systems were kept in operation if at all practicable; and
 - viii. The Permittee's actions in response to the excess emissions were documented by contemporaneous records.
 - 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 XI.E.2 of Part A.

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 XI.E.2 of Part A.

5. Demonstration of Reasonable and Practicable Measures

For an affirmative defense under XI.E.2 or 3 of Part A, the Permittee of the source shall demonstrate, through submission of the data and information required by XI.E.1 – 5 and XIII.B of Part A, that all reasonable and practicable measures within the owner or operator's control were implemented to prevent the occurrence of the excess emissions.

XII. RECORDKEEPING REQUIREMENTS

[PCC 17.12.180.A.4]

- A. The Permittee shall keep records of all required monitoring information including recordkeeping requirements established pursuant to PCC 17.12.190, where applicable, for 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 for continuous monitoring instrumentation, and copies of all reports required by the permit.
- C. All required records shall be maintained using a normal business electronic recordkeeping format or printed records including handwritten forms or logbooks utilizing indelible ink.

XIII. REPORTING REQUIREMENTS

[PCC 17.12.180.A.5]

The Permittee shall comply with all of the reporting requirements of this permit. These include all of the following:

- A. Compliance certifications pursuant to VII of Part A.
- B. Excess emissions; permit deviations, and emergency reports in accordance with XI of Part A.
- C. Performance test results in accordance with XVII.F of Part A.
- D. Reporting requirements are listed in Part B of this permit.

XIV. DUTY TO PROVIDE INFORMATION

[PCC 17.12.180.A.8.e, PCC 17.12.160.G, and PCC 17.12.160.H]

- A. The Permittee shall furnish to the Control Officer, within a reasonable time, any information that the Control Officer 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 Control Officer copies of records required to be kept by the permit. For information claimed to be confidential, the Permittee, for Class I sources, 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 if the Permittee 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. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a proposed permit.

XV. PERMIT AMENDMENT OR REVISION

[PCC 17.12.245, PCC 17.12.255 and PCC 17.12.260]

The Permittee shall apply for a permit amendment or revision for changes to the facilities which do not qualify for a facility change without revision under XVI of Part A, as follows:

- A. Administrative Permit Amendment (PCC 17.12.245);
- B. Minor Permit Revision (PCC 17.12.255);
- C. Significant Permit Revision (PCC 17.12.260).

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

XVI. FACILITY CHANGES ALLOWED WITHOUT PERMIT REVISIONS

[PCC 17.12.230]

- A. A facility with a Class I permit may make changes without a permit revision if all of the following apply:
 - 1. The changes are not modifications under any provision of Title I of the Clean Air Act (Air Pollution Prevention and Control) or under modifications as defined in A.R.S. 49-401.01;
 - 2. The changes do not exceed the emissions allowable under the permit whether expressed therein as a rate of emissions or in terms of total emissions;
 - 3. The changes do not violate any applicable requirements or trigger any additional applicable requirements;
 - 4. The changes satisfy all requirements for a minor permit revision under PCC 17.12.255; and
 - 5. The changes do not contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements.

- B. The substitution of an item of process or pollution control equipment for an identical or substantially similar item of process or pollution control equipment shall qualify as a change that does not require a permit revision, if the substitution meets all of the requirements of XVI.A, D and E of Part A.
- C. Except for sources with authority to operate under general permits, permitted sources may trade increases and decreases in emissions within the permitted facility, as established in the permit under PCC 17.12.180.A.12 if an applicable implementation plan provides for the emissions trades, without applying for a permit revision and based on the seven working days' notice prescribed in XVI.D of Part A. This provision is available if the permit does not provide for the emissions trading as a minor permit revision.
- D. For each change under XVI.A through C of Part A, a written notice, by certified mail or hand delivery, shall be received by the Control Officer and the Administrator a minimum of seven (7) working days in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided less than 7 working days in advance of the change 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.
- E. Each notification shall include:
1. When the proposed change will occur;
 2. A description of the change;
 3. Any change in emissions of regulated air pollutants;
 4. The pollutants emitted subject to the emissions trade, if any;
 5. The provisions in the implementation plan that provide for the emissions trade with which the source will comply and any other information as may be required by the provisions in the implementation plan authorizing the trade;
 6. If the emissions trading provisions of the implementation plan are invoked, then the permit requirements with which the source will comply; and
 7. Any permit term or condition that is no longer applicable as a result of the change.
- F. The permit shield described in PCC 17.12.310 shall not apply to any change made under XVI.A through C of this Part. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the implementation plan authorizing the emissions trade.
- G. Except as otherwise provided for in the permit, making a change from one alternative operating scenario to another as provided under PCC 17.12.180.A.11 shall not require any prior notice under XVI Part A.
- H. Notwithstanding any other part of this Section, the Control Officer may require a permit to be revised for any change that when considered together with any other changes submitted by the same source under the provisions of PCC 17.12.230 over the term of the permit, do not satisfy XVI.A of this Part.

XVII. TESTING REQUIREMENTS

[PCC 17.12.050]

A. Operational Conditions During Testing

Performance tests shall be conducted while the unit is operating at full load under representative operational conditions unless other conditions are required by the applicable test method or in this permit. With prior written approval from the Control Officer, testing may be performed at a lower rate. Operations during start-up, shutdown, and malfunction (as defined in PCC 17.04.340.A) shall not constitute representative operational conditions unless otherwise specified in the applicable requirement.

B. Tests shall be conducted and data reduced in accordance with the test methods and procedures contained in the Arizona Testing Manual, 40 CFR 52; Appendices D and E, 40 CFR 60; Appendices A through F; and 40 CFR 61, Appendices B and C unless modified by the Control Officer pursuant to PCC 17.12.050.B.

C. Test Plan

At least 14 calendar days prior to performing a test, the Permittee shall submit a test plan to the Control Officer, in accordance with PCC 17.12.050.D and the Arizona Testing Manual.

D. 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.

E. 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 means of 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 Control Officer's approval, be determined using the arithmetic mean of the results of the other two runs. If the Control Officer or the Control Officer's designee is present, tests may only be stopped with the Control Officer's or such designee's approval. If the Control Officer or the Control Officer'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.

F. Report of Final Test Results

A written report of the results of all performance tests shall be submitted to the control officer within 30 days after the test is performed. The report shall be submitted in accordance with the Arizona Testing Manual.

XVIII. PROPERTY RIGHTS

[PCC 17.12.180.A.8.d]

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

XIX. SEVERABILITY CLAUSE

[PCC 17.12.180.A.7]

The provisions of this permit are severable. In the event of a challenge to any portion of this permit that results in any provision of this permit being held invalid, the remainder of this permit shall not be affected thereby.

XX. ACCIDENT PREVENTION REQUIREMENTS UNDER THE CLEAN AIR ACT (CAA Section 112(r))

Should this stationary source, as defined in 40 CFR Part 68.3, become subject to the accidental release prevention regulations in Part 68, then the Permittee shall submit a risk management plan (RMP) by the date specified in Section 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 CFR Part 70 and Part B of this permit.

XXI. ASBESTOS REQUIREMENTS (Demolition/ Renovation)

Should this stationary source, pursuant to 40 CFR 61, Subpart M become subject to the National Emission Standards for Hazardous Air Pollutants - Asbestos for asbestos regulations when conducting any renovation or demolition at this premises, then the Permittee shall submit proper notification as described in 40 CFR Subpart M and shall comply with all other applicable requirements of subpart M. The Permittee shall keep a record of all relevant paperwork on file.

[40 CFR 61, Subpart M]

XXII. STRATOSPHERIC OZONE DEPLETING SUBSTANCES

The Permittee shall not use, sell, or offer for sale any fluid as a substitute material for use in any motor vehicle, residential, commercial, or industrial air conditioning system, refrigerator or freezer unit, or other cooling or heating device designed to use a chlorofluorocarbon (CFC) or hydrochlorofluorocarbon (HCFC) compound as a working fluid, unless such fluid has been approved for sale and such use by the Administrator. The Permittee shall keep a record of all paperwork relevant to the applicable requirements of 40 CFR 82, Subpart F onsite.

[40 CFR 82 and PCC 17.16.710]

PART B: SPECIFIC PROVISIONS

[References are to Title 17 of the Pima County Code unless otherwise noted]

I. APPLICABILITY

Affected Emission Source or Process: Class I; Major Source for Particulate Matter, Particulate Matter less than Ten Microns, Particulate Matter less than Two Point Five microns, Nitrogen Oxide and a True Minor for all other Pollutants.

This is an existing grandfathered PSD major source for NO_x, PM, PM₁₀ and a true minor source for all other pollutants. The affected emission sources are grouped into the following emission limitation Sections; the specific emission points within each Section are listed (where applicable).

Key for emission point numbers

DA	Deposition Activities
MP	By-Products Plant
SS	Stack Sources – Air pollution control devices
CF	Fugitive Sources – Combustion off gases
HF	Fugitive sources – Materials handling
MA	Fugitive Sources – Mine activities
OF	Fugitive Sources – Operational
VF	Fugitive Sources – Vehicles on unpaved sources
WF	Fugitive Sources – Wind erosion
OPM	Ore Processing – Mission circuit
OPN	Ore Processing – North circuit
OPS	Ore Processing – South circuit
NSPS	Equipment subject to New Source Performance Standards

A location plan of each specific emission point is presented in Attachment 3 of this permit.

Section 1 Mission Primary Crusher and Stockpile

<u>Emission Group A</u>	<u>Emission Points</u>
2 Apron Feeders	HFOPM-1 (M303-E4 and M303-E5)
54" Mission Primary Gyratory	M303-E3
60" Wear Belt Conveyor	M303-E9
<u>Emission Group B</u>	<u>Emission Points</u>
Air Pollution Control Devices	SSOPM-1, SSOPM-2 (NSPS)
<u>Emission Group C</u>	<u>Emission Points</u>
Material Handling	HFOPM-2
Ore Storage	WFOPM-1

Section 2 Mission Secondary Crusher

<u>Emission Group A</u>	<u>Emission Points</u>
Main Secondary Crushers	307-E3 (NSPS), 307-E4 (NSPS)
Tertiary Crushers	307-E12 (NSPS), 307-E13 (NSPS), M307-E54 (NSPS)

Emission Group A (continued)

Double Deck Screens

Emission Points

M307-E1 (NSPS), M307-E2 (NSPS), M307-E5 (NSPS),
M307-E6 (NSPS), M307-E14 (NSPS), M307-E15 (NSPS),
M307-E55 (NSPS).

Emission Group B

Air Pollution Control Devices

Emission Points

SSOPM-3 (NSPS), SSOPM-4 (NSPS), SSOPM-5 (NSPS),
SSOPM-6 (NSPS), SSOPM-7 (NSPS), SSOPM-19

Section 3 Mission Concentrator

Emission Group A

Air Pollution Control Devices

Wet Scrubbers

Dry Dust Collectors

Emission Points

SSOPN-7 (NSPS), SSOPM-14, SSOPM-15, SSOPM-16
SSOPN-6 (NSPS), SSOPM-8 (NSPS), SSOPM-9 (NSPS)
SSOPM-10 (NSPS), SSOPM-11 (NSPS), SSOPM-12 (NSPS)
SSOPM-13 (NSPS), SSOPM-17

Emission Group B

Material Handling

Emission Point

HFOPM-5, SSOPM-18

Section 4 Mission North Primary Crusher and Stockpile

Emission Group A

Crushers

Conveyors

Screens

Emission Points

361-26-1, 361-38-1, 361-02A
361-28, 361-07, 361-8, 361-29, 361-30, 361-40, 361-16,
361-42
361-34, 361-36

Emission Group B

Air Pollution Control Devices

Wet Scrubbers

Dry Dust Collectors

Emission Points

SSOPN-1, SSOPN-2, SSOPN-3
SSOPN-4

Emission Group C

Material Handling

Coarse Ore Storage

Emission Points

HFOPN-1, HFOPN-2
WFOPN-1, SSOPN-5

Section 5 Mission South Primary Crusher and Stockpile

Emission Group A

54" Gyratory Crusher

54" Belt Conveyor

Emission Points

10-101

10-103

Emission Group B

Air Pollution Control Devices

Wet Scrubbers

Emission Points

SSOPS-1, SSOPS-2

Emission Group C

Material Handling

Ore Storage

Emission Points

HFOPS-1, HFOPS-2

WFOPS-1

Section 6 Mission South Concentrator

<u>Emission Group A</u>	<u>Emission Points</u>
Omni Cone Crushers	20-262 (NSPS), 20-263 (NSPS)
Belt Conveyors	20-255 (NSPS), 20-265 (NSPS)
Feeders	20-252 (NSPS), 20-253 (NSPS), 20-254 (NSPS), 20-258 (NSPS), 20-259 (NSPS), 20-285 (NSPS), SSOPS-5(NSPS)

<u>Emission Group B</u>	<u>Emission Points</u>
Air Pollution Control Devices	
Dry Dust Collector	SSOPS-6
Wet Scrubbers	SSOPS-3, SSOPS-4 (NSPS)

<u>Emission Group C</u>	<u>Emission Points</u>
Belt Conveyor	20-250
Feeder	SSOPS-7
Double Deck Screens	30-203, 30-204

Section 7 Combustion Off Gasses

<u>Emission Group A</u>	<u>Emission Points</u>
Combustion Off Gases (Generator)	CFMA-1, CFMA-2, CFMA-3

Section 8 Mine Activities

<u>Emission Group A</u>	<u>Emission Points</u>
Mineral Tailings	Common to Tailing Location
Vehicles on Unpaved Surfaces	VFMA-1 through VFMA-6
Operational Drilling and Blasting	OFMA-1, OFMA-2

Section 9 Compliance Assurance Monitoring Plan

Part 64 of the Code of Federal Regulations (CFR), as defined in the Compliance Assurance Monitoring Plan (CAM) rule, requires monitoring, compliance certification, periodic reporting, and recordkeeping information collections by the Permittee for controlled pollutant specific emissions units (PSEU's) that have a pre-control potential to emit major amounts of regulated air pollutants.

The CAM plan is intended to provide a reasonable assurance of compliance with the applicable requirements (e.g. emission limits) for PSEU's that rely on control device equipment to achieve compliance.

Section 10 By Product (Molybdenum) Plant

<u>Emission Group A</u>	<u>Emission Points</u>
Material Handling	353-113 and 353-114

<u>Emission Group B</u>	<u>Emission Points</u>
Air Pollution Control Device	SSMP-1

Section 11 Gasoline Dispensing Facilities

Section 12 Facility Wide Reporting Requirements

Part B

Section 1

Mission Primary Crusher and Stockpile

The provisions of this Section apply to the following affected facilities (emission points):

Emission Group	Process/Unit Description		Emission Point Number(s)
A	2 Apron Feeders		HFOPM-1 (M303-E4 and M303-E5)
	54" Mission Primary Gyratory Crusher		M303-E3
	60" Wear Belt Conveyor		M303-E9
B	Air Pollution Control Devices	Wet Scrubber	SSOPM-1
		Hydrostatic Precipitator	SSOPM-2 (NSPS)
C	Materials Handling (Belt Transfer to Coarse Ore Storage)		HFOPM-2
	(Ore Storage)		WFOPM-1

I. Emission Limitations and Standards

The provisions of this Section are listed corresponding to each emission group above.

A. Emission Group A

The Permittee shall not cause, or permit the effluent from a single emission point, multiple emission points, or fugitive emissions source to have an average optical density greater than 20 percent opacity in any area that is attainment or unclassifiable for each particulate matter standard except as provided in Subsections PCC 17.16.130.D and E. [SIP Rule 321, PCC 17.16.040, PCC 17.16.050.B and PCC 17.16.130.B]

B. Emission Group B

1. Wet Scrubber SSOPM-1

[Locally Enforceable Conditions]

- a. The Permittee shall not cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any process source subject to the provisions of this Subsection in total quantities in excess of the amounts calculated by the following equation:

$$E = 17.31P^{0.16}$$

[PCC 17.16.360.B.2]

where:

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

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

- b. The actual values shall be calculated from the equation and rounded off to two decimal places. [PCC 17.16.360.C]
- c. For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter. [PCC 17.16.360.D]
- d. The Permittee shall not cause, allow or permit the effluent from wet scrubber stack SSOPM-1 to have an average optical density equal to or greater than 20 percent opacity in any area that is attainment or unclassifiable for each particulate matter standard except as provided in Subsections PCC 17.16.130.D and E. [SIP Rule 321, PCC 17.16.040, PCC 17.16.050.B and PCC 17.16.130.B]

[Locally Enforceable Condition]

2. Hydrostatic Precipitator SSOPM-2

- a. The Permittee shall not cause to be discharged into the atmosphere any stack emissions from hydrostatic precipitator SSOPM-2 that contain particulate matter in excess of 0.05 grams per dry standard cubic meter. [40 CFR 60.382(a)(1)]
[Material Permit Condition]
- b. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the hydrostatic precipitator SSOPM-2 in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Control Officer which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)]
[Material Permit Condition]
- c. 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. Process fugitive emissions are emissions from an affected facility that are not collected by a capture system. [40 CFR 60.382(b)]
[Material Permit Condition]
- d. The Permittee shall not cause, allow or permit the effluent from the hydrostatic precipitator stack SSOPM-2 to have an average optical density equal to or greater than 20 percent opacity, that is attainment or unclassifiable for each particulate matter standard except as provided in Subsections PCC 17.16.130.D and E. [SIP Rule 321, PCC 17.16.040, PCC 17.16.050.B and PCC 17.16.130.B]

C. Emission Group C

1. Opacity Limitation

The Permittee shall not cause, or permit the effluent from a single emission point, multiple emission points, or fugitive emissions source to have an average optical density greater than 20 percent in any area that is attainment or unclassifiable for each particulate matter standard except as provided in Subsections PCC 17.16.130.D and E.

[SIP Rule 321, PCC 17.16.040, PCC 17.16.050.B and PCC 17.16.130.B]

2. Material Handling

The Permittee shall not cause, suffer, allow or permit crushing, screening, handling, transporting or conveying of materials or other operations likely to result in significant amounts of airborne dust without taking reasonable precautions, such as the use of spray bars, wetting agents, dust suppressants, covering the load, and hoods to prevent excessive amounts of particulate matter from becoming airborne.

[PCC 17.16.100.A]

[Locally Enforceable Condition]

3. Coarse Ore Storage

a. No person shall cause, suffer, allow, or permit diffusion of visible emissions, including fugitive dust, beyond the property boundary line within which the emissions become airborne, without taking reasonably necessary and feasible precautions to control generation of airborne particulate matter. Sources may be required to cease temporarily the activity or operation which is causing or contributing to the emissions until reasonably necessary and feasible precautions are taken.

[SIP Rule 343 and PCC 17.16.050.D]

i. Sources required to obtain an air quality permit under ARS 49-426, ARS 49-480 or PCC 17.12.470 may request to have the actions constituting reasonably necessary and feasible precautions approved and included as permit conditions. Compliance with such permit conditions shall be considered compliance with this provision.

ii. This Subsection shall not apply when wind speeds exceed twenty-five (25) miles per hour (using the Beaufort Scale of Wind-Speed Equivalents, or as recorded by the National Weather Service). This exception does not apply if control measures have not been taken or were not commensurate with the size or scope of the emission source.

iii. This Condition shall not apply to the generation of airborne particulate matter from undisturbed land.

b. No person shall cause, suffer, allow or permit operations or activities likely to result in excessive amounts of airborne dust without taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne.

[PCC 17.16.050.A]

[Locally Enforceable Condition]

c. Dust emissions from storage of materials must be minimized by enclosing the material within structures, planting and maintaining vegetative growth over the material, use of chemical dust suppressants, wetting, covering, or other equivalently effective controls.

[SIP Rule 316.D and PCC 17.16.110.A]

d. Stacking and reclaiming machinery utilized at storage piles shall be operated at all times with a minimum fall of material and in such manner, or with the use of spray bars and wetting agents, as to minimize and control to ensure compliance with I.C.2 of this Section.

[PCC 17.16.110.B]

[Locally Enforceable Condition]

II. Monitoring Requirements

A. Emission Group A

1. The Permittee shall demonstrate compliance with the opacity limitation in I.A of this Section by monitoring the emissions from the exterior of the building housing¹ the Gyrotory Crusher (emission point M303-E3), the 60" Wear Belt Conveyor (emission point M303-E9) and the two Apron feeders HFOPM-1 (emission points M303-E4 and M303-E5) biweekly (every two weeks).

[PCC 17.12.180.A.3.c]

[Locally Enforceable Condition]

2. If the observer sees a plume from the exterior of the building housing emission points M303-E3 through M303-E5 and M303-E9 that, on an instantaneous basis, appears to exceed 20 percent opacity, then the Permittee shall take a six-minute Method 9 observation of the plume. If the emissions are 20 percent opacity or more this shall be recorded and reported as an excess emission and permit deviation.

[PCC 17.12.180.A.3.c]

[Locally Enforceable Condition]

B. Emission Group B

1. Wet Scrubber SSOPM-1

- a. The Permittee shall demonstrate compliance with the opacity limitation in I.B.1d of this Section by monitoring the emissions from the Air Pollution Control Device (emission point SSOPM-1) biweekly (every two weeks).

[PCC 17.12.180.A.3.c]

[Locally Enforceable Condition]

- b. If the observer sees a plume from emission points SSOPM-1 that, on an instantaneous basis, appears to exceed 20 percent opacity, then the Permittee shall take a six-minute Method 9 observation of the plume. If the emissions are 20 percent opacity or more this shall be recorded and reported as an excess emission and permit deviation.

[PCC 17.12.180.A.3.c]

[Locally Enforceable Condition]

2. Wet Scrubber SSOPM-2

- a. The Permittee shall install, calibrate, maintain, and operate a monitoring device for the continuous measurement of the change in pressure of the gas stream through the hydrostatic precipitator SSOPM-2. The monitoring device must be certified by the manufacturer to be accurate within ± 250 pascals (± 1 inch water) gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions.

[40 CFR 60.384(a)]

[Material Permit Condition]

- b. The Permittee shall demonstrate compliance with the opacity limitation in I.B.2.c and d of this Section by monitoring the emissions from the Air Pollution Control Device (emission point SSOPM-2) biweekly (every two weeks).

[PCC 17.12.180.A.3.c]

[Locally Enforceable Condition]

- c. If the observer sees any process fugitive emissions from an affected facility that, on an instantaneous basis, appears to exceed 10 percent opacity, then the Permittee shall take a six-

¹ EPA Determination Detail Control #0500092. See the Technical Support Document accompanying this permit.

minute Method 9 observation of the plume. If the emissions are 10 percent opacity or more this shall be recorded and reported as an excess emission and permit deviation. [PCC 17.12.180.A.3.c]

[Locally Enforceable Condition]

- d. If the observer sees a plume from the hydrostatic precipitator stack (emission point SSOPM-2) that, on an instantaneous basis, appears to exceed 20 percent opacity, then the Permittee shall take a six-minute Method 9 observation of the plume. If the emissions are 20 percent opacity or more this shall be recorded and reported as an excess emission and permit deviation.

[PCC 17.12.180.A.3.c]

[Locally Enforceable Condition]

C. Emission Group C

1. Material Handling

[Locally Enforceable Conditions]

- a. The Permittee shall monitor the fugitive emissions from the Belt Transfer (emission point HFOPM-2) biweekly (every two weeks). [PCC 17.12.180.A.3.c]
- b. If the observer sees a plume from emission point HFOPM-2 that, on an instantaneous basis, appears to exceed 20 percent opacity, then the Permittee shall take a six-minute Method 9 observation of the plume. If the emissions are 20 percent opacity or more, this shall be recorded and reported as an excess emission and permit deviation. [PCC 17.12.180.A.3.c]
- c. If the observer, during the visual survey, does not see any plume from emission point HFOPM-2 that, on an instantaneous basis, appears to exceed the 20 percent opacity standard, then the observer shall keep a record of the name of the observer, the date on which the observation was made, the location, and the results of the observation. [PCC 17.12.180.A.3.c]
- d. If the six-minute opacity of the plume is less than the 20 percent opacity standard, then the observer shall make a record of the following: [PCC 17.12.180.A.3.c]
 - i. Location, date, and time of the test; and
 - ii. The results of the Method 9 observation.
- e. If the six-minute opacity of the plume exceeds the 20% opacity standard, then the Permittee shall do the following: [PCC 17.12.180.A.3.c]
 - i. Modify material handling procedures (belt transfer and ore unloading) to reduce the opacity to below the opacity standard; and
 - ii. Report it as excess emissions.

2. Ore Storage

[Locally Enforceable Conditions]

- a. The Permittee shall monitor the fugitive emissions from the Coarse Ore Storage Stockpile (emission point WFOPM-1) biweekly (every two weeks). [PCC 17.12.180.A.3.c]
- b. If the observer sees a plume that, on an instantaneous basis, appears to exceed 20 percent opacity, then the Permittee shall take a six-minute Method 9 observation of the plume. If the emissions are 20 percent opacity or more, this shall be recorded and reported as an excess emission and permit deviation. [PCC 17.12.180.A.3.c]
- c. If the observer, during the visual survey, does not see any plume from the Coarse Ore Storage Stockpile (emission point WFOPM-1) that, on an instantaneous basis, appears to exceed the 20 percent opacity standard, then the observer shall keep a record of the name of the observer, the date on which the observation was made, the location, and the results of the observation. [PCC 17.12.180.A.3.c]

III. Recordkeeping Requirements

- A. During the initial performance test of the hydrostatic precipitator SSOPM-2, and at least weekly thereafter, the Permittee shall record the measurements of the change in pressure of the gas stream across the scrubber. [40 CFR 60.385(b)]
- B. The requirements of this Subsection remain in force until and unless the Agency, in delegating enforcement authority to a State under Section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In that event, affected sources within the State will be relieved of the obligation to comply with this Subsection, provided that they comply with requirements established by the State. [40 CFR 60.385(e)]
- C. The Permittee shall record the daily process rates and hours of operation of all material handling facilities. [PCC 17.16.360.F]

[Locally Enforceable Condition]

IV. Reporting Requirements (hydrostatic precipitator SSOPM-2 only)

- A. The owner or operator subject to the provisions of 40 CFR 60 Subpart LL shall submit to the Control Officer a written report of the results of the test as specified in 40 CFR 60.8(a), V.B of this Section. [40 CFR 60.385(a)]
- B. After the initial performance test of the hydrostatic precipitator SSOPM-2, the owner or operator shall submit semiannual reports to the Control Officer of occurrences when the measurements of the scrubber pressure loss (or gain) differ by more than ± 30 percent from the average obtained during the most recent performance test. [40 CFR 60.385(c)]
- C. The reports required under IV.B of this Section shall be postmarked within 30 days following the end of the second and fourth calendar quarters. [40 CFR 60.385(d)]

V. Testing Requirements

For purposes of demonstrating compliance, these test methods shall be used, provided that for the purpose of establishing whether or not the facility has violated or is in violation of any provision of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a facility would have been in compliance with applicable federal requirements if the appropriate performance or compliance procedures or methods had been performed. [PCC 17.20.010]

[Locally Enforceable Condition]

A. Wet Scrubber SSOPM-1

1. The Permittee shall determine compliance with the particulate matter standards in I.B.1.a of this Section as follows: [PCC 17.12.180.A.3]

[Locally Enforceable Condition]

2. The Permittee shall conduct a performance test for particulate matter at least once during the term of this permit on at least one control device in each of the groups listed in the 'schedule of performance tests' identified in Attachment 4 of this Permit. The provisions of EPA Reference Method 5 or 17 shall be used to conduct the test. [PCC 17.20.010]

[Locally Enforceable Condition]

B. Hydrostatic Precipitator SSOPM-2

1. In conducting the performance tests required in 40 CFR 60.8, the Permittee shall use as reference methods and procedures the test methods in Appendix A of 40 CFR 60 or other methods and procedures as specified in this Section, except as provided in 40 CFR 60. [40 CFR 60.386(a)]

2. The Permittee shall periodically determine compliance with the particulate matter standards in I.B.2 of this Section as follows: [40 CFR 60.386(b)]

- a. The Permittee shall conduct a performance test for particulate matter at least once during the term of this permit on at least one control device in each of the groups listed in the 'schedule of performance tests' identified in Attachment 4 of this Permit. The provisions of EPA Reference Method 5 or 17 shall be used to conduct the test. [PCC 17.20.010]

[Locally Enforceable Condition]

- b. Method 5 or 17 shall be used to determine the particulate matter concentration. The sample volume for each run shall be at least 1.70 dscm (60 dscf). The sampling probe and filter holder of Method 5 may be operated without heaters if the gas stream being sampled is at ambient temperature. For gas streams above ambient temperature, the Method 5 sampling train shall be operated with a probe and filter temperature slightly above the effluent temperature (up to a maximum filter temperature of 121°C (250°F)) in order to prevent water condensation on the filter. [40 CFR 60.386(b)(1)]

- c. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity from stack emissions and process fugitive emissions. The observer shall read opacity only when emissions are clearly identified as emanating solely from the affected facility being observed. [40 CFR 60.386(b)(2)]

- d. To comply with IV.B of this Section, the Permittee shall use the monitoring devices in II.B.2.a of this Section to determine the pressure loss of the gas stream through the scrubber at any time during each particulate matter run and the average of the three determinations shall be computed. [40 CFR 60.386(c)]

Part B

Section 2

Mission Secondary Crusher

The provisions of this Section apply to the following affected facilities (emission points):

Emission Group	Process/Unit Description	Emission Point Number(s)
A	(Main Secondary Crusher) (NSPS)	307-E3, 307-E4
	(Tertiary Crushers) (NSPS)	307-E12, 307-E13, M307-E54
	(Double Deck Screens) (NSPS)	M307-E1, M307-E2, M307-E5, M307-E6 M307-E14, M307-E15, M307-E55
B	Air Pollution Control Devices (Wet Scrubbers)	SSOPM-3 (NSPS), SSOPM-4 (NSPS), SSOPM-5 (NSPS), SSOPM-6 (NSPS), SSOPM-7 (NSPS), SSOPM-19

I. Emission Limitations and Standards

The provisions of this Section are listed corresponding to each equipment group above.

A. Emission Group A

1. The Permittee shall not cause to be discharged into the atmosphere any process fugitive emissions that exhibit greater than 10 percent opacity. [40 CFR 60.382(b)]
[Material Permit Condition]
2. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate any affected facility in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Control Officer which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)]
[Material Permit Condition]

B. Emission Group B

1. The Permittee shall not cause to be discharged into the atmosphere any stack emissions from wet scrubbers SSOPM-3 through SSOPM-7 that contain particulate matter in excess of 0.05 grams per dry standard cubic meter. [40 CFR 60.382(a)(1)]
[Material Permit Condition]
2. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment (i.e. wet scrubbers SSOPM-3 through SSOPM-7 in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Control Officer which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)]
[Material Permit Condition]

3. 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. Process fugitive emissions are emissions from an affected facility that are not collected by a capture system. [40 CFR 60.382(b)]
[Material Permit Condition]
4. The Permittee shall not cause, allow or permit the effluent from wet scrubber stacks SSOPM-3 through SSOPM-7 and SSOPM-19 to have an average optical density equal to or greater than 20 percent opacity, that is attainment or unclassifiable for each particulate matter standard except as provided in Subsections PCC 17.16.130.D and E.
[SIP Rule 321, PCC 17.16.040, PCC 17.16.050.B and PCC 17.16.130.B]

II. Monitoring Requirements

A. Emission Group A

1. The Permittee shall demonstrate compliance with the opacity limitation in I.A.1 of this Section by monitoring the emissions from the exterior of the building² housing the Main Secondary/Tertiary Crushers and Double Deck Screens biweekly (every two weeks). [PCC 17.12.180.A.3.c]
[Locally Enforceable Condition]
2. If the observer sees a plume from the exterior of the building³ housing the emission points identified in Group A, that on an instantaneous basis, appears to exceed 20 percent opacity, then the Permittee shall take a six-minute Method 9 observation of the plume. If the emissions are 20 percent opacity or more this shall be recorded and reported as an excess emission and permit deviation.
[PCC 17.12.180.A.3.c]
[Locally Enforceable Condition]

B. Emission Group B

1. The Permittee shall install, calibrate, maintain, and operate a monitoring device for the continuous measurement of the change in pressure of the gas stream through the scrubber for any affected facility using a wet scrubbing emission control device (i.e. wet scrubbers SSOPM-3 through SSOPM-7 when necessary to operate). The monitoring device must be certified by the manufacturer to be accurate within ± 250 pascals (± 1 inch water) gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions. [40 CFR 60.384(a)]
[Material Permit Condition]
2. The Permittee shall install, calibrate, maintain, and operate a monitoring device for the continuous measurement of the scrubbing liquid flow rate to wet scrubbers SSOPM-3 through SSOPM-7 when necessary to operate. The monitoring device must be certified by the manufacturer to be accurate within ± 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)]
[Material Permit Condition]
3. The Permittee shall demonstrate compliance with the opacity limitation in I.B.3 and 4 of this Section by monitoring the fugitive emissions from the affected facility and the emissions from the Air Pollution Control Devices (emission points SSOPM-3 through SSOPM-7 and SSOPM-19) biweekly (every two weeks). Monitoring for fugitive emissions from SSOPM-19 is not necessary during periods when the unit is shutdown. [PCC 17.12.180.A.3.c]
[Locally Enforceable Condition]

² EPA Determination Detail Control #0500092. See the Technical Support Document accompanying this permit.

4. If the observer sees any process fugitive emissions from an affected facility that, on an instantaneous basis, appears to exceed 10 percent opacity, then the Permittee shall take a six-minute Method 9 observation of the plume. If the emissions are 10 percent opacity or more this shall be recorded and reported as an excess emission and permit deviation. [PCC 17.12.180.A.3.c]
[Locally Enforceable Condition]
5. If the observer sees a plume from wet scrubber stacks SSOPM-3 through SSOPM-7 and SSOPM-19 that, on an instantaneous basis, appears to exceed 20 percent opacity, then the Permittee shall take a six-minute Method 9 observation of the plume. If the emissions are 20 percent opacity or more this shall be recorded and reported as an excess emission and permit deviation. [PCC 17.12.180.A.3.c]
[Locally Enforceable Condition]
6. If the observer, during the visual survey, does not see any plume from emission point emission points SSOPM-3 through SSOPM-7 and SSOPM-19 that, on an instantaneous basis, appears to exceed the 20 percent opacity standard, then the observer shall keep a record of the name of the observer, the date on which the observation was made, the location, and the results of the observation. [PCC 17.12.180.A.3.c]
[Locally Enforceable Condition]
7. If the six-minute opacity of the plume is less than the 20 percent opacity standard, then the observer shall make a record of the following: [PCC 17.12.180.A.3.c]
[Locally Enforceable Conditions]
 - a. Location, date, and time of the test; and
 - b. The results of the Method 9 observation.
8. If the six-minute opacity of the plume exceeds the 20% opacity standard, then the Permittee shall do the following: [PCC 17.12.180.A.3.c]
[Locally Enforceable Condition]
 - a. Investigate the cause of the exceedance and modify the operating and maintenance procedures of the process to reduce the opacity to below the opacity standard and,
 - b. Report it as excess emissions.

III. Recordkeeping Requirements

- A. During the initial performance test of a wet scrubbers SSOPM-3 through SSOPM-7, and at least weekly thereafter, the owner or operator shall record the measurements of both the change in pressure of the gas stream across the scrubber and the scrubbing liquid flow rate. [40 CFR 60.385(b)]
- B. The Permittee shall record all periods when the wet scrubber SSOPM-19 is operating. [PCC 17.12.180.A.4]
[Locally Enforceable Condition]
- C. The requirements of this Subsection remain in force until and unless the Agency, in delegating enforcement authority to a State under Section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In that event, affected sources within the State will be relieved of the obligation to comply with this Subsection, provided that they comply with requirements established by the State. [40 CFR 60.385(e)]

IV. Reporting Requirements (Wet Scrubbers SSOPM-3 through SSOPM-7 only)

- A. The owner or operator subject to the provisions of this subpart shall submit to the Control Officer a written report of the results of the test as specified in 40 CFR 60.8(a), V.B of this Section. [40 CFR 60.385(a)]
- B. After the initial performance test of wet scrubbers SSOPM-3 through SSOPM-7, the owner or operator shall submit semiannual reports to the Control Officer of occurrences when the measurements of the scrubber pressure loss (or gain) or liquid flow rate differ by more than ± 30 percent from the average obtained during the most recent performance test. [40 CFR 60.385(c)]
- C. The reports required under paragraph IV.B of this Section shall be postmarked within 30 days following the end of the second and fourth calendar quarters. [40 CFR 60.385(d)]

V. Testing Requirements

For purposes of demonstrating compliance, these test methods shall be used, provided that for the purpose of establishing whether or not the facility has violated or is in violation of any provision of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a facility would have been in compliance with applicable federal requirements if the appropriate performance or compliance procedures or methods had been performed. [PCC 17.20.010]

[Locally Enforceable Condition]

- A. In conducting the performance tests required in 40 CFR 60.8, the Permittee shall use as reference methods and procedures the test methods in Appendix A of 40 CFR 60 or other methods and procedures as specified in this Section, except as provided in 40 CFR 60. [40 CFR 60.386]
- B. The Permittee shall determine compliance with the particulate matter standards in I.B.1 of this Section as follows: [40 CFR 60.386(b)]
1. The Permittee shall conduct a performance test for particulate matter at least once during the term of this permit on at least one control device in each of the groups listed in the 'schedule of performance tests' identified in Attachment 4 of this Permit. The provisions of EPA Reference Method 5 or 17 shall be used to conduct the test. [PCC 17.20.010]
[Locally Enforceable Condition]
 2. Method 5 or 17 shall be used to determine the particulate matter concentration. The sample volume for each run shall be at least 1.70 dscm (60 dscf). The sampling probe and filter holder of Method 5 may be operated without heaters if the gas stream being sampled is at ambient temperature. For gas streams above ambient temperature, the Method 5 sampling train shall be operated with a probe and filter temperature slightly above the effluent temperature (up to a maximum filter temperature of 121°C (250°F)) in order to prevent water condensation on the filter. [40 CFR 60.386(b)(1)]
 3. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity from stack emissions and process fugitive emissions. The observer shall read opacity only when emissions are clearly identified as emanating solely from the affected facility being observed. [40 CFR 60.386(b)(2)]
 4. To comply with IV.B of this Section, the Permittee shall use the monitoring devices in II.B.1 and II.B.2 of this Section to determine the pressure loss of the gas stream through the scrubber and scrubbing liquid flow rate at any time during each particulate matter run and the average of the three determinations shall be computed. [40 CFR 60.386(c)]

Part B

Section 3

Mission Concentrator

The provisions of this Section apply to the following affected facilities (emission points):

Emission Group	Process/Unit Description	Emission Point Number(s)
A	[Reserved]	[Reserved]
B	Air Pollution Control Devices (Wet Scrubbers)	SSOPN-7 (NSPS), SSOPM-14, SSOPM-15, SSOPM-16
	Air Pollution Control Devices (Dry Dust Collectors) (Vented Outside)	SSOPN-6 (NSPS), SSOPM-8 (NSPS), SSOPM-17
	Air Pollution Control Devices (Dry Dust Collectors) (Vented Inside North Mill)	SSOPM-9 (NSPS), SSOPM-10 (NSPS), SSOPM-11 (NSPS), SSOPM-12 (NSPS), SSOPM-13 (NSPS)
C	Material Handling (Dump Pocket Hopper)	SSOPM-18, HFOPM-5

I. Emission Limitations and Standards

The provisions of this Section are listed corresponding to each equipment group above.

A. Emission Group A [Reserved]

B. Emission Group B

1. Wet Scrubber SSOPN-7

Dry Dust Collectors SSOPN-6 and SSOPM-8 through SSOPM-13

a. The Permittee shall not cause to be discharged into the atmosphere any stack³ emissions from any affected facility (including air pollution control equipment) that contain particulate matter in excess of 0.05 grams per dry standard cubic meter.

[40 CFR 60.382(a)(1)]

[Material Permit Condition]

b. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Control Officer which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[40 CFR 60.11(d)]

[Material Permit Condition]

³ Exclusion for Dry Dust Collectors SSOPM-9 through SSOPM-13 as these emission points vent inside the North Mill.

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- c. 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. Process fugitive emissions are emissions from an affected facility that are not collected by a capture system.

[40 CFR 60.382(b)]

[Material Permit Condition]

- d. The Permittee shall not cause, allow or permit the effluent from the wet scrubber stacks SSOPN-7, SSOPM-14, SSOPM-15 and SSOPM-16, to have an average optical density equal to or greater than 20 percent opacity, that is attainment or unclassifiable for each particulate matter standard except as provided in Subsections PCC 17.16.130.D and E.

[SIP Rule 321, PCC 17.16.040, PCC 17.16.050.B and PCC 17.16.130.B]

- e. The Permittee shall not cause to be discharged into the atmosphere from an affected facility process stack emissions that exhibit greater than 7 percent opacity unless the stack emissions are discharged from an affected facility using a wet scrubbing device (applicable to dry dust collectors SSOPN-6 and SSOPM-8 only).

[40 CFR 60.382(a)(2)]

[Material Permit Condition]

2. Dry Dust Collector (SSOPM-17)

[Locally Enforceable Conditions]

- a. The Permittee shall not cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any process source subject to the provisions of this Subsection in total quantities in excess of the amounts calculated by the following equation:

[PCC 17.16.360.B.2]

$$E = 17.31P^{0.16}$$

where:

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

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

- b. The actual values shall be calculated from the equation and rounded off to two decimal places.

[PCC 17.16.360.C]

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

[PCC 17.16.360.D]

- d. The Permittee shall not cause, allow or permit the effluent from dry dust collector stack SSOPM-17 to have an average optical density equal to or greater than 20 percent opacity, that is attainment or unclassifiable for each particulate matter standard except as provided in Subsections PCC 17.16.130.D and E.

[SIP Rule 321, PCC 17.16.040, PCC 17.16.050.B and PCC 17.16.130.B]

C. Emission Group C

1. Opacity Limitation

The Permittee shall not cause, allow or permit the effluent from Emission Points HFOPM-5 and SSOPM-18 to have an average optical density equal to or greater than 20 percent opacity, that is attainment or unclassifiable for each particulate matter standard except as provided in Subsections PCC 17.16.130.D and E.

[SIP Rule 321, PCC 17.16.040, PCC 17.16.050.B and PCC 17.16.130.B]

2. Material Handling

The Permittee shall not cause, suffer, allow or permit crushing, screening, handling, transporting or conveying of materials or other operations likely to result in significant amounts of airborne dust without taking reasonable precautions, such as the use of spray bars, wetting agents, dust suppressants, covering the load, and hoods to prevent excessive amounts of particulate matter from becoming airborne.

[PCC 17.16.100.A]

[Locally Enforceable Condition]

II. Monitoring Requirements

A. Emission Group A [Reserved]

B. Emission Group B

1. Wet Scrubber SSOPN-7
Dry Dust Collectors SSOPN-6 and SSOPM-8 Only

a. The Permittee shall install, calibrate, maintain, and operate a monitoring device for the continuous measurement of the change in pressure of the gas stream through the scrubber for any affected facility using a wet scrubbing emission control device⁴. The monitoring device must be certified by the manufacturer to be accurate within ± 250 Pascal's (± 1 inch water) gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions.

[40 CFR 60.384(a)]

[Material Permit Condition]

b. The Permittee shall install, calibrate, maintain, and operate a monitoring device for the continuous measurement of the scrubbing liquid flow rate to a wet scrubber for any affected facility using any type of wet scrubbing emission control device⁴. The monitoring device must be certified by the manufacturer to be accurate within ± 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)]

[Material Permit Condition]

c. The Permittee shall demonstrate compliance with the opacity limitation in I.B.1.c, d and e of this Section by monitoring the emissions from the Air Pollution Control Devices biweekly (every two weeks).

[PCC 17.12.180.A.3.c]

[Locally Enforceable Condition]

d. If the observer sees any process fugitive emissions from an affected facility that, on an instantaneous basis, appears to exceed 10 percent opacity, then the Permittee shall take a six-minute Method 9 observation of the plume. If the emissions are 10 percent opacity or more this shall be recorded and reported as an excess emission and permit deviation.

[PCC 17.12.180.A.3.c]

[Locally Enforceable Condition]

e. If the observer, during the visual survey, does not see any process fugitive emissions from an affected facility that, on an instantaneous basis, appears to exceed the 10 percent opacity standard, then the observer shall keep a record of the name of the observer, the date on which the observation was made, the location, and the results of the observation.

[PCC 17.12.180.A.3.c]

[Locally Enforceable Condition]

⁴ Exclusion for Dry Dust Collectors SSOPM-9 through SSOPM-13 as these emission points vent inside the North Mill

- f. If the observer sees a plume from any affected facility stack using a wet scrubbing emission control device (emission points SSOPN-7, SSOPM-14, SSOPM-15 and SSOPM-16) that, on an instantaneous basis, appears to exceed 20%, then the Permittee shall take a six-minute Method 9 observation of the plume. If the emissions are 20% or more this shall be recorded and reported as an excess emission and permit deviation. [PCC 17.12.180.A.3.c]
[Locally Enforceable Condition]
- g. If the observer, during the visual survey, does not see any plume from any affected facility using a wet scrubbing emission control device (emission points SSOPN-7, SSOPM-14, SSOPM-15 and SSOPM-16) that, on an instantaneous basis, appears to exceed the 20 percent opacity standard, then the observer shall keep a record of the name of the observer, the date on which the observation was made, the location, and the results of the observation. [PCC 17.12.180.A.3.c]
[Locally Enforceable Condition]
- h. If the observer sees a plume from any affected facility using a dry dust collector (emission points SSOPN-6 and SSOPM-8 only) that, on an instantaneous basis, appears to exceed 7 percent opacity, then the Permittee shall take a six-minute Method 9 observation of the plume. If the emissions are greater than 7 percent opacity this shall be recorded and reported as an excess emission and permit deviation. [PCC 17.12.180.A.3.c]
[Locally Enforceable Condition]
- i. If the observer, during the visual survey, does not see any plume from any affected facility using a dry dust collector (emission points SSOPN-6 and SSOPM-8 only) that, on an instantaneous basis, appears to exceed the 7 percent opacity standard, then the observer shall keep a record of the name of the observer, the date on which the observation was made, the location, and the results of the observation. [PCC 17.12.180.A.3.c]
[Locally Enforceable Condition]
2. Dry Dust Collector (SSOPM-17) **[Locally Enforceable Conditions]**
- a. The Permittee shall demonstrate compliance with the opacity limitation in I.B.2.d of this Section by monitoring the emissions from the Air Pollution Control Device biweekly (every two weeks). ★ [PCC 17.12.180.A.3.c]
- b. If the observer sees a plume from emission points SSOPM-17 on an instantaneous basis, appears to exceed 20 percent opacity, then the Permittee shall take a six-minute Method 9 observation of the plume. If the emissions are 20 percent opacity or more this shall be recorded and reported as an excess emission and permit deviation. [PCC 17.12.180.A.3.c]
- c. If the observer, during the visual survey, does not see any plume from point SSOPM-17 that, on an instantaneous basis, appears to exceed the 20 percent opacity standard, then the observer shall keep a record of the name of the observer, the date on which the observation was made, the location, and the results of the observation. [PCC 17.12.180.A.3.c]

3. All Air Pollution Control Devices

[Locally Enforceable Conditions]

- a. For each required six-minute Method 9 observation, the observer shall make a record of the following: [PCC 17.12.180.A.3.c]
 - i. Location, date, and time of the test; and
 - ii. The results of the Method 9 observation.
- b. If the six-minute Method 9 opacity of the plume exceeds the percent opacity in I.B.1.c, d, e or I.B.2.d then the Permittee shall do the following: [PCC 17.12.180.A.3.c]
 - i. Modify material handling procedures (ore unloading and transfer) to reduce the opacity to below the opacity standard; and
 - ii. Report it as excess emissions.

C. Emission Group C

[Locally Enforceable Conditions]

1. The Permittee shall monitor the fugitive emissions from the Dump Pocket Hopper (emission points HFOPM-5 and SSOPM-18) biweekly (every two weeks). [PCC 17.12.180.A.3.c]
2. If the observer sees a plume that, on an instantaneous basis, appears to exceed 20 percent opacity, then the Permittee shall take a six-minute Method 9 observation of the plume. If the emissions are 20 percent opacity or more, this shall be recorded and reported as an excess emission and permit deviation. [PCC 17.12.180.A.3.c]
3. If the observer, during the visual survey, does not see any plume from the Dump Pocket Hopper (emission points HFOPM-5 and SSOPM-18) that, on an instantaneous basis, appears to exceed the 20 percent opacity standard, then the observer shall keep a record of the name of the observer, the date on which the observation was made, the location, and the results of the observation. [PCC 17.12.180.A.3.c]
4. If the six-minute opacity of the plume is less than the 20 percent opacity standard, then the observer shall make a record of the following: [PCC 17.12.180.A.3.c]
 - a. Location, date, and time of the test; and
 - b. The results of the Method 9 observation.
5. If the six-minute opacity of the plume exceeds the 20 percent opacity standard, then the Permittee shall do the following: [PCC 17.12.180.A.3.c]
 - a. Modify material handling procedures (ore unloading and transfer) to reduce the opacity to below the opacity standard; and
 - b. Report it as excess emissions.

III. Recordkeeping Requirements

- A. During the initial performance test of a wet scrubber SSOPN-7 and at least weekly thereafter, the owner or operator shall record the measurements of both the change in pressure of the gas stream across the scrubber and the scrubbing liquid flow rate. [40 CFR 60.385(b)]
- B. The requirements of this Subsection remain in force until and unless the Agency, in delegating enforcement authority to a State under Section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In that event, affected sources within the State will be relieved of the obligation to comply with this Subsection, provided that they comply with requirements established by the State. [40 CFR 60.385(e)]
- C. The Permittee shall record the daily process rates and hours of operation of all material handling facilities [PCC 17.16.360.F]
[Locally Enforceable Condition]

IV. Reporting Requirements (Wet Scrubber SSOPN-7 only)

- A. The owner or operator subject to the provisions of this subpart shall submit to the Control Officer a written report of the results of the test as specified in 40 CFR 60.8(a) under V.A of this Section 3. [40 CFR 60.385(a)]
- B. After the initial performance test of a wet scrubber, the owner or operator shall submit semiannual reports to the Control Officer of occurrences when the measurements of the scrubber pressure loss (or gain) or liquid flow rate differ by more than ± 30 percent from the average obtained during the most recent performance test. [40 CFR 60.385(c)]
- C. The reports required under IV.B of this Section shall be postmarked within 30 days following the end of the second and fourth calendar quarters. [40 CFR 60.385(d)]

V. Testing Requirements

For purposes of demonstrating compliance, these test methods shall be used, provided that for the purpose of establishing whether or not the facility has violated or is in violation of any provision of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a facility would have been in compliance with applicable federal requirements if the appropriate performance or compliance procedures or methods had been performed. [PCC 17.20.010]

[Locally Enforceable Condition]

- A. Wet Scrubber SSOPN-7
Dry Dust Collectors SSOPN-6 and SSOPM-8 Only
1. In conducting the performance tests required in 40 CFR 60.8, the Permittee shall use as reference methods and procedures the test methods in Appendix A of 40 CFR 60 or other methods and procedures as specified in this Section, except as provided in 40 CFR 60. [40 CFR 60.386]
 2. The Permittee shall determine compliance with the particulate matter standards in I.B.1.a of this Section as follows: [40 CFR 60.386(b)]
 - a. The Permittee shall conduct a performance test for particulate matter at least once during the term of this permit on at least one control device in each of the groups listed in the 'schedule of performance tests' identified in Attachment 4 of this Permit. The provisions of EPA Reference Method 5 or 17 shall be used to conduct the test [PCC 17.20.010]

[Locally Enforceable Condition]

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- b. Method 5 or 17 shall be used to determine the particulate matter concentration. The sample volume for each run shall be at least 1.70 dscm (60 dscf). The sampling probe and filter holder of Method 5 may be operated without heaters if the gas stream being sampled is at ambient temperature. For gas streams above ambient temperature, the Method 5 sampling train shall be operated with a probe and filter temperature slightly above the effluent temperature (up to a maximum filter temperature of 121°C (250°F)) in order to prevent water condensation on the filter. [40 CFR 60.386(b)(1)]
3. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity from stack emissions (i.e. SSOPN-6, SSOPN-7 and SSOPM-8) and process fugitive emissions. The observer shall read opacity only when emissions are clearly identified as emanating solely from the affected facility being observed. [40 CFR 60.386(b)(2)]
4. To comply with IV.B of this Section, the Permittee shall use the monitoring devices in II.B.1.a and II.B.1.b of this Section to determine the pressure loss of the gas stream through the scrubber and scrubbing liquid flow rate at any time during each particulate matter run and the average of the three determinations shall be computed. [40 CFR 60.386(c)]

B. Dry Dust Collector (SSOPM-17) **[Locally Enforceable Conditions]**

The Permittee shall determine compliance with the particulate matter standards in I.B.2.a of this Section 3 as follows: [PCC 17.12.180.A.3]

The Permittee shall conduct a performance test for particulate matter at least once during the term of this permit on at least one control device in each of the groups listed in the 'schedule of performance tests' identified in Attachment 4 of this Permit. The provisions of EPA Reference Method 5 or 17 shall be used to conduct the test. [PCC 17.20.010]

Part B

Section 4

Mission North Primary Crusher and Stockpile

The provisions of this Section apply to the following affected facilities (emission points):

Emission Group	Process/Unit Description	Emission Point Number(s)
A	(Crushers)	361-26-1, 361-38-1, 361-02A
	(Conveyors)	361-28, 361-07, 361-8, 361-29, 361-30, 361-40, 361-16, 361-42
	(Screens)	361-34, 361-36
B	Air Pollution Control Devices (Wet Scrubbers)	SSOPN-1, SSOPN-2, SSOPN-3,
	Air Pollution Control Devices (Dry Dust Collector)	SSOPN-4
C	Materials Handling (Ore Processing)	HFOPN-1, HFOPN-2, SSOPN-5
	(Coarse Ore Storage)	WFOPN-1

I. Emission Limitations and Standards

The provisions of this Section are listed corresponding to each emission group above.

A. Emission Group A

The Permittee shall not cause, or permit the effluent from a single emission point, multiple emission points, or fugitive emissions source to have an average optical density greater than 20 percent, that is attainment or unclassifiable for each particulate matter standard except as provided in Subsections PCC 17.16.130.D and E. [SIP Rule 321, PCC 17.16.040, PCC 17.16.050.B and PCC 17.16.130.B]

B. Emission Group B

1. Wet Scrubbers SSOPN-1, SSOPN-2 and SSOPN-3
Dry Dust Collector SSOPN-4

[Locally Enforceable Conditions]

- a. The Permittee shall not cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any process source subject to the provisions of this Subsection in total quantities in excess of the amounts calculated by the following equation:

$$E = 17.31P^{0.16}$$

[PCC 17.16.360.B.2]

where:

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

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

- b. The actual values shall be calculated from the equation and rounded off to two decimal places. [PCC 17.16.360.C]
- c. For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter. [PCC 17.16.360.D]
- d. The Permittee shall not cause, or permit the effluent from a single emission point, multiple emission points, or fugitive emissions source to have an average optical density greater than 20 percent, that is attainment or unclassifiable for each particulate matter standard except as provided in Subsections PCC 17.16.130.D and E. [SIP Rule 321, PCC 17.16.040, PCC 17.16.050.B and PCC 17.16.130.B]

C. Emission Group C

1. Opacity Limitation

The Permittee shall not cause, or permit the effluent from a single emission point, multiple emission points, or fugitive emissions source to have an average optical density greater than 20 percent, that is attainment or unclassifiable for each particulate matter standard except as provided in Subsections PCC 17.16.130.D and E. [SIP Rule 321, PCC 17.16.040, PCC 17.16.050.B and PCC 17.16.130.B]

2. Material Handling

The Permittee shall not cause, suffer, allow or permit crushing, screening, handling, transporting or conveying of materials or other operations likely to result in significant amounts of airborne dust without taking reasonable precautions, such as the use of spray bars, wetting agents, dust suppressants, covering the load, and hoods to prevent excessive amounts of particulate matter from becoming airborne. [PCC 17.16.100.A]

[Locally Enforceable Condition]

3. Coarse Ore Storage

a. No person shall cause, suffer, allow, or permit diffusion of visible emissions, including fugitive dust, beyond the property boundary line within which the emissions become airborne, without taking reasonably necessary and feasible precautions to control generation of airborne particulate matter. Sources may be required to cease temporarily the activity or operation which is causing or contributing to the emissions until reasonably necessary and feasible precautions are taken. [SIP Rule 343 and PCC 17.16.050.D]

i. Sources required to obtain an air quality permit under ARS 49-426, ARS 49-480 or PCC 17.12.470 may request to have the actions constituting reasonably necessary and feasible precautions approved and included as permit conditions e.g. (not exclusively) compliance with Section 8 'Mine Activities' of this permit. Compliance with I.C.3.a.i of this Section shall be satisfied by demonstrating compliance with Section 8, "Mine Activities" of this permit. [PCC 17.16.050.D.1]

ii. This Subsection shall not apply when wind speeds exceed twenty-five (25) miles per hour (using the Beaufort Scale of Wind-Speed Equivalents, or as recorded by the National Weather Service). This exception does not apply if control measures have not been taken or were not commensurate with the size or scope of the emission source. [PCC 17.16.050.D.2]

iii. This Subsection shall not apply to the generation of airborne particulate matter from undisturbed land. [PCC 17.16.050.D.3]

b. No person shall cause, suffer, allow or permit operations or activities likely to result in excessive amounts of airborne dust without taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne. [PCC 17.16.050.A]

[Locally Enforceable Condition]

c. Dust emissions from storage of materials must be minimized by enclosing the material within structures, planting and maintaining vegetative growth over the material, use of chemical dust suppressants, wetting, covering, or other equivalently effective controls. [SIP Rule 316.D and PCC 17.16.110.A]

d. Stacking and reclaiming machinery utilized at storage piles shall be operated at all times with a minimum fall of material and in such manner, or with the use of spray bars and wetting agents, as to minimize and control to ensure compliance with I.C.2 of this Section. [PCC 17.16.110.B]

[Locally Enforceable Condition]

II. Monitoring Requirements

A. Emission Group A

[Locally Enforceable Conditions]

1. The Permittee shall demonstrate compliance with the opacity limitation in I.A of this Section by monitoring the emissions from the exterior of the building housing the Crushers (emission points: 361-26-1, 361-38-1, 361-02A), Conveyors (emission points: 361-28, 361-07, 361-8, 361-29, 361-30, 361-40, 361-16, 361-42) and Screens (emission points: 361-34, 361-36) biweekly (every two weeks). [PCC 17.12.180.A.3.c]

2. If the observer sees a plume from the exterior of the building housing⁵ emission points 361-26-1, 361-38-1, 361-02A, 361-28, 361-07, 361-8, 361-29, 361-30, 361-40, 361-16, 361-42, 361-34 and 361-36 that, on an instantaneous basis, appears to exceed 20%, then the Permittee shall take a six-minute Method 9 observation of the plume. If the emissions are 20% or more this shall be recorded and reported as an excess emission and permit deviation. [PCC 17.12.180.A.3.c]

B. Emission Group B

1. Wet Scrubbers SSOPN-1, SSOPN-2 and SSOPN-3
Dry Dust Collector SSOPN-4

[Locally Enforceable Conditions]

a. The Permittee shall demonstrate compliance with the opacity limitation in I.B.1.d of this Section 4 by monitoring the emissions from the Air Pollution Control Devices identified in this Subsection biweekly (every two weeks). [PCC 17.12.180.A.3.c]

⁵ EPA Determination Detail Control #0500092. See the Technical Support Document accompanying this permit.

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- b. If the observer sees a plume from the emission points identified in this Subsection that, on an instantaneous basis, appears to exceed 20 percent opacity, then the Permittee shall take a six-minute Method 9 observation of the plume. If the emissions are 20 percent opacity or more this shall be recorded and reported as an excess emission and permit deviation. [PCC 17.12.180.A.3.c]
- c. If the observer, during the visual survey, does not see any plume from the emission points identified in this Subsection that, on an instantaneous basis, appears to exceed the 20 percent opacity standard, then the observer shall keep a record of the name of the observer, the date on which the observation was made, the location, and the results of the observation. [PCC 17.12.180.A.3.c]
- d. For each required six-minute Method 9 observation, the observer shall make a record of the following: [PCC 17.12.180.A.3.c]
 - i. Location, date, and time of the test; and
 - ii. The results of the Method 9 observation.
- e. If the six-minute Method 9 opacity of the plume exceeds the percent opacity in I.A, I.B.1.d or I.C.1 then the Permittee shall do the following: [PCC 17.12.180.A.3.c]
 - i. Modify material handling procedures (ore unloading and transfer) to reduce the opacity to below the opacity standard; and
 - ii. Report it as excess emissions.

C. Emission Group C

1. Material Handling

[Locally Enforceable Conditions]

- a. The Permittee shall monitor the fugitive emissions from the North Stockpile Feeder (emission point HFOPN-1), the Ore Storage Feeder (emission point HFOPN-2) and the Materials Handling Transfer Point (emission point SSOPN-5) biweekly (every two weeks). [PCC 17.12.180.A.3.c]
- b. If the observer sees a plume from emission points HFOPN-1, HFOPN-2 or SSOPN-5 that, on an instantaneous basis, appears to exceed 20 percent opacity, then the Permittee shall take a six-minute Method 9 observation of the plume. If the emissions are 20 percent opacity or more, this shall be recorded and reported as an excess emission and permit deviation. [PCC 17.12.180.A.3.c]
- c. If the observer, during the visual survey, does not see any plume from emission points HFOPN-1, HFOPN-2 or SSOPN-5 that, on an instantaneous basis, appears to exceed the 20 percent opacity standard, then the observer shall keep a record of the name of the observer, the date on which the observation was made, the location, and the results of the observation. [PCC 17.12.180.A.3.c]
- d. If the six-minute opacity of the plume is less than the 20 percent opacity standard, then the observer shall make a record of the following: [PCC 17.12.180.A.3.c]
 - i. Location, date, and time of the test; and
 - ii. The results of the Method 9 observation.

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- e. If the six-minute opacity of the plume exceeds the 20 percent opacity standard, then the Permittee shall do the following: [PCC 17.12.180.A.3.c]
- i. Modify material handling procedures (ore unloading and transfer) to reduce the opacity to below the opacity standard; and
 - ii. Report it as excess emissions.

2. Coarse Ore Storage **[Locally Enforceable Conditions]**

- a. The Permittee shall monitor the fugitive emissions from the Coarse Ore Storage Stockpile (emission point WFOPN-1) biweekly (every two weeks).
- b. If the observer sees a plume that, on an instantaneous basis, appears to exceed 20 percent opacity, then the Permittee shall take a six-minute Method 9 observation of the plume. If the emissions are 20 percent opacity or more, this shall be recorded and reported as an excess emission and permit deviation. [PCC 17.12.180.A.3.c]
- c. If the observer, during the visual survey, does not see any plume from the Coarse Ore Storage Stockpile (emission point WFOPN-1) that, on an instantaneous basis, appears to exceed the 20 percent opacity standard, then the observer shall keep a record of the name of the observer, the date on which the observation was made, the location, and the results of the observation. [PCC 17.12.180.A.3.c]

III. Recordkeeping Requirements

The Permittee shall record the daily process rates and hours of operation of all material handling facilities. [PCC 17.16.360.F]
[Locally Enforceable Conditions]

IV. Reporting Requirements

None additionally specified.

V. Testing Requirements

For purposes of demonstrating compliance, these test methods shall be used, provided that for the purpose of establishing whether or not the facility has violated or is in violation of any provision of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a facility would have been in compliance with applicable federal requirements if the appropriate performance or compliance procedures or methods had been performed. [PCC 17.20.010]
[Locally Enforceable Condition]

A. The Permittee shall determine compliance with the particulate matter standards in I.B.1.a of this Section 4 as follows: [PCC 17.12.180.A.3]
[Locally Enforceable Condition]

B. The Permittee shall conduct a performance test for particulate matter at least once during the term of this permit on at least one control device in each of the groups listed in the 'schedule of performance tests' identified in Attachment 4 of this Permit. The provisions of EPA Reference Method 5 or 17 shall be used to conduct the test. [PCC 17.20.010]
[Locally Enforceable Condition]

Part B

Section 5

Mission South Primary Crusher and Stockpile

The provisions of this Section apply to the following affected facilities (emission points):

Equipment Group	Process/Unit Description	Emission Point Number(s)
A	54" Mission South Primary Gyratory Crusher and 54" Belt Conveyor	10-101 10-103
B	Air pollution Control Devices (Wet Scrubbers)	SSOPS-1 SSOPS-2
C	Materials Handling (Apron Feeder and Belt Transfer to Coarse Ore Storage)	HFOPS-1 HFOPS-2
	(Coarse Ore Storage)	WFOPS-1

I. Emission Limitations and Standards

The provisions of this Section are listed corresponding to each equipment group above.

A. Emission Group A

1. The Permittee shall not cause, or permit the effluent from a single emission point, multiple emission points, or fugitive emissions source to have an average optical density greater than 20 percent, that is attainment or unclassifiable for each particulate matter standard except as provided in Subsections PCC 17.16.130.D and E. [SIP Rule 321, PCC 17.16.040, PCC 17.16.050.B and PCC 17.16.130.B]
2. The Permittee is prohibited from operating the South Mill primary crusher at a capacity greater than 2,000 tons per hour except during any period when the Mission Primary Crusher (M303-E3), or the Mission Secondary Crushers (307-E3 and 307-E4), or the North Primary Crusher (361-26-1) is off-line. [PCC 17.12.190.B and Installation Permit #2026]
[Locally Enforceable Condition]
3. The Permittee shall not allow the South Mill circuit throughput to exceed 12,500,000 tons per year, calculated as a 12 month rolling total. [PCC 17.12.190.B]

B. Emission Group B

[Locally Enforceable Conditions]

1. The Permittee shall not cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any process source subject to the provisions of this Subsection in total quantities in excess of the amounts calculated by the following equation: [PCC 17.16.360.B.2]

$$E = 17.31P^{0.16}$$

where:

E = the maximum, allowable particulate emission rate in pounds-mass per hour.
P = the process weight rate in tons-mass per hour.

2. The actual values shall be calculated from the equation and rounded off to two decimal places. [PCC 17.16.360.C]
3. For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter. [PCC 17.16.360.D]
4. The Permittee shall not cause, allow or permit the effluent from wet scrubber stack SSOPS-1 and SSOPS-2 to have an average optical density equal to or greater than 20 percent opacity, that is attainment or unclassifiable for each particulate matter standard except as provided in Subsections PCC 17.16.130.D and E. [SIP Rule 321, PCC 17.16.040, PCC 17.16.050.B and PCC 17.16.130.B]

C. Emission Group C

1. Opacity Limitation

The Permittee shall not cause, or permit the effluent from a single emission point, multiple emission points, or fugitive emissions source to have an average optical density greater than 20 percent, that is attainment or unclassifiable for each particulate matter standard except as provided in Subsections PCC 17.16.130.D and E. [SIP Rule 321, PCC 17.16.040, PCC 17.16.050.B and PCC 17.16.130.B]

2. Material Handling

The Permittee shall not cause, suffer, allow or permit crushing, screening, handling, transporting or conveying of materials or other operations likely to result in significant amounts of airborne dust without taking reasonable precautions, such as the use of spray bars, wetting agents, dust suppressants, covering the load, and hoods to prevent excessive amounts of particulate matter from becoming airborne. [PCC 17.16.100.A]

[Locally Enforceable Condition]

3. Coarse Ore Storage

a. No person shall cause, suffer, allow, or permit diffusion of visible emissions, including fugitive dust, beyond the property boundary line within which the emissions become airborne, without taking reasonably necessary and feasible precautions to control generation of airborne particulate matter. Sources may be required to cease temporarily the activity or operation which is causing or contributing to the emissions until reasonably necessary and feasible precautions are taken. [SIP Rule 343 and PCC 17.16.050.D]

- i. Sources required to obtain an air quality permit under ARS 49-426, ARS 49-480 or PCC 17.12.470 may request to have the actions constituting reasonably necessary and feasible precautions approved and included as permit conditions. Compliance with such permit conditions shall be considered compliance with this provision.
- ii. This Subsection shall not apply when wind speeds exceed twenty-five (25) miles per hour (using the Beaufort Scale of Wind-Speed Equivalents, or as recorded by the National Weather Service). This exception does not apply if control measures have not been taken or were not commensurate with the size or scope of the emission source.

- iii. This Condition shall not apply to the generation of airborne particulate matter from undisturbed land.
- b. No person shall cause, suffer, allow or permit operations or activities likely to result in excessive amounts of airborne dust without taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne. [PCC 17.16.050.A]
[Locally Enforceable Condition]
- c. Dust emissions from storage of materials must be minimized by enclosing the material within structures, planting and maintaining vegetative growth over the material, use of chemical dust suppressants, wetting, covering, or other equivalently effective controls. [SIP Rule 316.D and PCC 17.16.110.A]
- d. Stacking and reclaiming machinery utilized at storage piles shall be operated at all times with a minimum fall of material and in such manner, or with the use of spray bars and wetting agents, as to minimize and control to ensure compliance with I.C.2 of this Section. [PCC 17.16.110.B]
[Locally Enforceable Condition]

II. Monitoring Requirements

[Locally Enforceable Conditions]

A. Emission Group A

- 1. The Permittee shall demonstrate compliance with the opacity limitation in I.A.1 of this Section by monitoring the emissions from the exterior of the building housing⁶ the 54" Mission South Primary Gyratory Crusher and the 54" Belt Conveyor (emission points 10-101 and 10-103 respectively) biweekly (every two weeks). [PCC 17.12.180.A.3.c]
- 2. If the observer sees a plume from the exterior of the building housing emission points 10-101 and 10-103 that, on an instantaneous basis, appears to exceed 20 percent opacity, then the Permittee shall take a six-minute Method 9 observation of the plume. If the emissions are 20 percent opacity, or more this shall be recorded and reported as an excess emission and permit deviation. [PCC 17.12.180.A.3.c]
- 3. The Permittee shall monitor the daily process rate (tons per hour) through the Mission South Primary Crusher (10-101). [PCC 17.12.190.B]

B. Emission Group B

- 1. The Permittee shall demonstrate compliance with the opacity limitation in I.B.4 of this Section by monitoring the emissions from the Air Pollution Control Device (emission points SSOPS-1 and SSOPS-2) biweekly (every two weeks). [PCC 17.12.180.A.3.c]
- 2. If the observer sees a plume from emission points SSOPS-1 and SSOPS-2 that, on an instantaneous basis, appears to exceed 20 percent opacity, then the Permittee shall take a six-minute Method 9 observation of the plume. If the emissions are 20 percent opacity or more this shall be recorded and reported as an excess emission and permit deviation. [PCC 17.12.180.A.3.c]

⁶ EPA Determination Detail Control #0500092. See the Technical Support Document accompanying this permit.

C. Emission Group C

1. Material Handling

- a. The Permittee shall monitor the fugitive emissions from the Apron Feeder (emission points HFOPS-1 and HFOPS-2) biweekly (every two weeks). [PCC 17.12.180.A.3.c]
- b. If the observer sees a plume from the exterior of the South Mill Primary Crusher building housing the Apron Feeder and Belt Transfer to Coarse Ore Storage (emission points HFOPS-1 and HFOPS-2 respectively) that, on an instantaneous basis, appears to exceed 20 percent opacity, then the Permittee shall take a six-minute Method 9 observation of the plume. If the emissions are 20 percent opacity or more, this shall be recorded and reported as an excess emission and permit deviation. [PCC 17.12.180.A.3.c]
- c. If the observer, during the visual survey, does not see any plume from the emission points HFOPS-1 and HFOPS-2 that, on an instantaneous basis, appears to exceed the 20 percent opacity standard, then the observer shall keep a record of the name of the observer, the date on which the observation was made, the location, and the results of the observation. [PCC 17.12.180.A.3.c]
- d. If the six-minute opacity of the plume is less than the 20 percent opacity standard, then the observer shall make a record of the following: [PCC 17.12.180.A.3.c]
 - i. Location, date, and time of the test; and
 - ii. The results of the Method 9 observation.
- e. If the six-minute opacity of the plume exceeds the 20% opacity standard, then the Permittee shall do the following: [PCC 17.12.180.A.3.c]
 - i. Modify material handling procedures (ore unloading and transfer) to reduce the opacity to below the opacity standard; and
 - ii. Report it as excess emissions.

2. Coarse Ore Storage

- a. The Permittee shall monitor the fugitive emissions from the Coarse Ore Storage Stockpile (emission point WFOPS-1) biweekly (every two weeks). [PCC 17.12.180.A.3.c]
- b. If the observer sees a plume that, on an instantaneous basis, appears to exceed 20 percent opacity, then the Permittee shall take a six-minute Method 9 observation of the plume. If the emissions are 20 percent opacity or more, this shall be recorded and reported as an excess emission and permit deviation. [PCC 17.12.180.A.3.c]
- c. If the observer, during the visual survey, does not see any plume from the Coarse Ore Storage Stockpile (emission point WFOPS-1) that, on an instantaneous basis, appears to exceed the 20 percent opacity standard, then the observer shall keep a record of the name of the observer, the date on which the observation was made, the location, and the results of the observation. [PCC 17.12.180.A.3.c]

III. Recordkeeping Requirements

1. The Permittee shall record the daily process rates and hours of operation of all material handling facilities. The Permittee shall identify in the facility operating log any period when the Mission Primary Crusher (M303-E3), or the Mission Secondary Crushers (307-E3 and 307-E4), or the North Primary Crusher (361-26-1) is off-line.
[PCC 17.12.190.B and PCC 17.16.360.F]
[Locally Enforceable Condition]
2. The Permittee shall record the rolling 12 month throughput total of material processed through the South Mill circuit.
[PCC 17.12.190.B and PCC 17.16.360.F]

IV. Reporting Requirements

The Permittee shall submit semiannual summary reports of any periods when the South Mill circuit operations exceed the synthetic emission limitation throughput of 12,500,000 tons per year. [PCC 17.12.180.A.5]

V. Testing Requirements

For purposes of demonstrating compliance, these test methods shall be used, provided that for the purpose of establishing whether or not the facility has violated or is in violation of any provision of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a facility would have been in compliance with applicable federal requirements if the appropriate performance or compliance procedures or methods had been performed. [PCC 17.20.010]

[Locally Enforceable Condition]

- A. The Permittee shall determine compliance with the particulate matter standards in I.B.1 of this Section as follows:
[PCC 17.12.180.A.3]
- B. The Permittee shall conduct a performance test for particulate matter at least once during the term of this permit on at least one control device in each of the groups listed in the 'schedule of performance tests' identified in Attachment 4 of this Permit. The provisions of EPA Reference Method 5 or 17 shall be used to conduct the test.
[PCC 17.20.010]

[Locally Enforceable Condition]

Part B

Section 6

Mission South Concentrator

The provisions of this Section apply to the following affected facilities (emission points):

Emission Group	Process/Unit Description	Emission Point Number(s)
A	Omni Cone Crushers	20-262 (NSPS) 20-263 (NSPS)
	Belt Conveyors	20-255 (NSPS) 20-265 (NSPS)
	Feeders	20-252 (NSPS) 20-253 (NSPS) 20-254 (NSPS) 20-258 (NSPS) 20-259 (NSPS) 20-285 (NSPS)
	Transfer Point	SSOPS-5 (NSPS)
B	Air Pollution Control Devices (Dry Dust Collectors)	SSOPS-6
	Air Pollution Control Devices (Wet Scrubbers)	SSOPS-3 SSOPS-4 (NSPS)
C	Belt Conveyor	20-250
	Feeder	SSOPS-7
	Double Deck Screens	30-203, 30-204

I. Emission Limitations and Standards

The provisions of this Section are listed corresponding to each equipment group above.

A. Emission Group A

1. The Permittee shall not cause to be discharged into the atmosphere any process fugitive emissions that exhibit greater than 10 percent opacity. Process fugitive emissions are emissions from an affected facility that are not collected by a capture system. [40 CFR 60.382(b)]
2. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate any affected facility in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Control Officer which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)]

[Material Permit Condition]

3. The Permittee is prohibited from operating the South Mill Omni Cone crushers (20-262 and 20-263) at a capacity greater than 200 tons per hour each except during any period when the Mission Primary Crusher (M303-E3), or the Mission Secondary Crushers (307-E3 and 307-E4), or the North Primary Crusher (361-26-1) is off-line.

[PCC 17.12.190.B and Installation Permit #2026]

[Locally Enforceable Condition]

B. Emission Group B

1. Dry Dust Collector SSOPS-6 and
Wet Scrubber SSOPS-3

[Locally Enforceable Conditions]

- a. The Permittee shall not cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any process source subject to the provisions of this Subsection in total quantities in excess of the amounts calculated by the following equation:

[PCC 17.16.360.B.2]

$$E = 17.31P^{0.16}$$

where:

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

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

- b. The actual values shall be calculated from the equation and rounded off to two decimal places.
- c. For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.
- d. The Permittee shall not cause, allow or permit the effluent from dry dust collector stack SSOPS-6 or wet scrubber stack SSOPS-3 to have an average optical density equal to or greater than 20 percent opacity, that is attainment or unclassifiable for each particulate matter standard except as provided in Subsections PCC 17.16.130.D and E.

[SIP Rule 321, PCC 17.16.040, PCC 17.16.050.B and PCC 17.16.130.B]

2. Wet Scrubber SSOPS-4

- a. The Permittee shall not cause to be discharged into the atmosphere any stack emissions from wet scrubber SSOPS-4 that: contain particulate matter in excess of 0.05 grams per dry standard cubic meter.
- b. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate wet scrubber SSOPS-4 in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Control Officer which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[40 CFR 60.11(d)]

[Material Permit Condition]

- c. 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. Process fugitive emissions are emissions from an affected facility that are not collected by a capture system.

[40 CFR 60.382(b)]

[Material Permit Condition]

C. Emission Group C

The Permittee shall not cause, or permit the effluent from a single emission point, multiple emission points, or fugitive emissions source to have an average optical density greater than 20 percent opacity, that is attainment or unclassifiable for each particulate matter standard except as provided in Subsections PCC 17.16.130.D and E. [SIP Rule 321, PCC 17.16.040, PCC 17.16.050.B and PCC 17.16.130.B]

II. Monitoring Requirements

[Locally Enforceable Conditions]

A. Emission Group A

1. The Permittee shall demonstrate compliance with the opacity limitation in I.A.1 of this Section by monitoring the emissions from the exterior of the building⁷ housing the Omni Crushers (emissions point 20-262 and 20-263), the Belt Conveyors (emission points 20-255 and 20-265), the Feeders (emission points 20-252, 20-253, 20-254, 200-258, 20259 and 20-285), the Transfer Point (SSOPS-5) and the Double Deck Screens (emission points 30-203 and 30-204) biweekly (every two weeks). [PCC 17.12.180.A.3.c]
2. If the observer sees a plume from the exterior of the building³ housing the Omni Crushers or sees a plume from any other emission point identified in emission group A, that on an instantaneous basis, appears to exceed 10 percent opacity, then the Permittee shall take a six-minute Method 9 observation of the plume. If the emissions are 10 percent opacity or more this shall be recorded and reported as an excess emission and permit deviation. [PCC 17.12.180.A.3.c]
3. The Permittee shall monitor the daily process rate (tons per hour) through the South Mill Omni Cone crushers (20-262 and 20-263). [PCC 17.12.190.B]

B. Emission Group B

1. Dry Dust Collector SSOPS-6 and Wet Scrubber SSOPS-3
 - a. The Permittee shall demonstrate compliance with the opacity limitation in I.B.1.d of this Section by monitoring the emissions from the Air Pollution Control Device (emission points SSOPS-6 and SSOPS-3) biweekly (every two weeks). [PCC 17.12.180.A.3.c]
[Locally Enforceable Condition]
 - b. If the observer sees a plume from emission points SSOPS-6 and SSOPS-3 that, on an instantaneous basis, appears to exceed 20 percent opacity, then the Permittee shall take a six-minute Method 9 observation of the plume. If the emissions are 20 percent opacity or more this shall be recorded and reported as an excess emission and permit deviation. [PCC 17.12.180.A.3.c]
[Locally Enforceable Condition]
 - c. If the observer, during the visual survey, does not see any plume from point SSOPS-6 and SSOPS-3 that, on an instantaneous basis, appears to exceed the 20 percent opacity standard, then the observer shall keep a record of the name of the observer, the date on which the observation was made, the location, and the results of the observation. [PCC 17.12.180.A.3.c]
[Locally Enforceable Condition]

⁷ EPA Determination Detail Control #0500092. See the Technical Support Document accompanying this permit.

2. Wet Scrubber SSOPS-4

- a. The Permittee shall install, calibrate, maintain, and operate a monitoring device for the continuous measurement of the change in pressure of the gas stream through the scrubber for any affected facility using a wet scrubbing emission control device (SSOPS-4). The monitoring device must be certified by the manufacturer to be accurate within ± 250 Pascal's (± 1 inch water) gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions. [40 CFR 60.384(a)]
[Material Permit Condition]
- b. The Permittee shall install, calibrate, maintain, and operate a monitoring device for the continuous measurement of the scrubbing liquid flow rate to a wet scrubber (SSOPS-4) for any affected facility using any type of wet scrubbing emission control device. The monitoring device must be certified by the manufacturer to be accurate within ± 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)]
[Material Permit Condition]
- c. The Permittee shall demonstrate compliance with the opacity limitation in I.B.2.c of this Section by monitoring the emissions from the Air Pollution Control Devices (SSOPS-4) biweekly (every two weeks). [PCC 17.12.180.A.3.c]
[Locally Enforceable Condition]
- d. If the observer sees any process fugitive emissions from an affected facility that, on an instantaneous basis, appears to exceed 10 percent opacity, then the Permittee shall take a six-minute Method 9 observation of the plume. If the emissions are 10 percent opacity or more this shall be recorded and reported as an excess emission and permit deviation. [PCC 17.12.180.A.3.c]
[Locally Enforceable Condition]
- e. If the observer, during the visual survey, does not see any fugitive emissions from an affected facility that, on an instantaneous basis, appears to exceed the 10 percent opacity standard, then the observer shall keep a record of the name of the observer, the date on which the observation was made, the location, and the results of the observation. [PCC 17.12.180.A.3.c]
[Locally Enforceable Condition]
- f. If the observer sees a plume from emission point SSOPS-4 that, on an instantaneous basis, appears to exceed 20 percent opacity, then the Permittee shall take a six-minute Method 9 observation of the plume. If the emissions are 20 percent opacity or more this shall be recorded and reported as an excess emission and permit deviation. [PCC 17.12.180.A.3.c]
[Locally Enforceable Condition]
- g. If the observer, during the visual survey, does not see any plume from any affected facility using a wet scrubbing emission control device (SSOPS-4) that, on an instantaneous basis, appears to exceed the 20 percent opacity standard, then the observer shall keep a record of the name of the observer, the date on which the observation was made, the location, and the results of the observation. [PCC 17.12.180.A.3.c]
[Locally Enforceable Condition]

3. All Air Pollution Control Devices **[Locally Enforceable Conditions]**

a. For each required six-minute Method 9 observation, the observer shall make a record of the following: [PCC 17.12.180.A.3.c]

i. Location, date, and time of the test; and

ii. The results of the Method 9 observation.

b. If the six-minute Method 9 opacity of the plume exceeds the percent opacity in I.B.1.d or I.B.2.c of this Section then the Permittee shall do the following: [PCC 17.12.180.A.3.c]

i. Modify material handling procedures (ore unloading and transfer) to reduce the opacity to below the opacity standard; and

ii. Report it as excess emissions.

C. Emission Group C **[Locally Enforceable Conditions]**

1. The Permittee shall demonstrate compliance with the opacity limitation in I.C of this Section by monitoring the emissions from the stockpile belt conveyor (emission point 20-250) biweekly (every two weeks). [PCC 17.12.180.A.3.c]

2. If the observer sees a plume from the belt conveyor (emission point 20-250) that, on an instantaneous basis, appears to exceed 20 percent opacity, then the Permittee shall take a six-minute Method 9 observation of the plume. If the emissions are 20 percent opacity, or more this shall be recorded and reported as an excess emission and permit deviation. [PCC 17.12.180.A.3.c]

III. Recordkeeping Requirements

A. During the initial performance test of a wet scrubber SSOPS-4, and at least weekly thereafter, the owner or operator shall record the measurements of both the change in pressure of the gas stream across the scrubber and the scrubbing liquid flow rate. [40 CFR 60.385(b)]

B. The requirements of this Subsection remain in force until and unless the Agency, in delegating enforcement authority to a State under Section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In that event, affected sources within the State will be relieved of the obligation to comply with this Subsection, provided that they comply with requirements established by the State. [40 CFR 60.385(e)]

C. The Permittee shall record the daily process rates and hours of operation of all material handling facilities. The Permittee shall specifically record in the facility operating log any period when the Mission Primary Crusher (M303-E3), or the Mission Secondary Crushers (307-E3 and 307-E4), or the North Primary Crusher (361-26-1) is off-line. [PCC 17.12.190.B and PCC 17.16.360.F]

[Locally Enforceable Condition]

IV. Reporting Requirements (Wet Scrubber SSOPS-4 only)

- A. The owner or operator subject to the provisions of 40 CFR 60 Subpart LL shall submit to the Control Officer a written report of the results of the test as specified in 40 CFR 60.8(a), V.A of this Section. [40 CFR 60.385(a)]
- B. After the initial performance test of wet scrubber SSOPS-4, the owner or operator shall submit semiannual reports to the Control Officer of occurrences when the measurements of the scrubber pressure loss (or gain) or liquid flow rate differ by more than ± 30 percent from the average obtained during the most recent performance test. [40 CFR 60.385(c)]
- C. The reports required under IV.B of this Section shall be postmarked within 30 days following the end of the second and fourth calendar quarters. [40 CFR 60.385(d)]

V. Testing Requirements

For purposes of demonstrating compliance, these test methods shall be used, provided that for the purpose of establishing whether or not the facility has violated or is in violation of any provision of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a facility would have been in compliance with applicable federal requirements if the appropriate performance or compliance procedures or methods had been performed. [PCC 17.20.010]

[Locally Enforceable Condition]

A. Wet Scrubber SSOPS-4

1. In conducting the performance tests required in 40 CFR 60.8, the Permittee shall use as reference methods and procedures the test methods in Appendix A of 40 CFR 60 or other methods and procedures as specified in this Section, except as provided in 40 CFR 60. [40 CFR 60.386]
2. The Permittee shall determine compliance with the particulate matter standards in I.B.2 of this Section as follows:
 - a. The Permittee shall conduct a performance test for particulate matter at least once during the term of this permit on at least one control device in each of the groups listed in the 'schedule of performance tests' identified in Attachment 4 of this Permit. The provisions of EPA Reference Method 5 or 17 shall be used to conduct the test [PCC 17.20.010]
[Locally Enforceable Condition]
 - b. Method 5 or 17 shall be used to determine the particulate matter concentration. The sample volume for each run shall be at least 1.70 dscm (60 dscf). The sampling probe and filter holder of Method 5 may be operated without heaters if the gas stream being sampled is at ambient temperature. For gas streams above ambient temperature, the Method 5 sampling train shall be operated with a probe and filter temperature slightly above the effluent temperature (up to a maximum filter temperature of 121°C (250°F)) in order to prevent water condensation on the filter. [40 CFR 60.386(b)(1)]
 - c. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity from stack emissions and process fugitive emissions. The observer shall read opacity only when emissions are clearly identified as emanating solely from the affected facility being observed. [40 CFR 60.386(b)(2)]

- d. To comply with IV.B of this Section, the Permittee shall use the monitoring devices in II.B.2.a and II.B.2.b of this Section to determine the pressure loss of the gas stream through the scrubber and scrubbing liquid flow rate at any time during each particulate matter run and the average of the three determinations shall be computed. [40 CFR 60.386(c)]

B. Dry Dust Collector SSOPS-6 and Wet Scrubber SSOPS-3

The Permittee shall determine compliance with the particulate matter standards in I.B.1.a of this Section as follows: [PCC 17.12.180.A.3]

[Locally Enforceable Condition]

The Permittee shall conduct a performance test for particulate matter at least once during the term of this permit on at least one control device in each of the groups listed in the 'schedule of performance tests' identified in Attachment 4 of this Permit. The provisions of EPA Reference Method 5 or 17 shall be used to conduct the test. [PCC 17.20.010]

[Locally Enforceable Condition]



Part B

Section 7

Combustion Off Gasses

The provisions of this Section apply to the following affected facility (emission point):

Emission Group	Process/Unit Description	Fuel	Emission Point Number	NESHAP Engine Category	Compliance Date for Federal Regulations*
A	(South Mill) (Stationary Emergency Generator)	Diesel	N/A	Existing Stationary RICE Located at an Area Source of HAP Emissions	May 3, 2013

* Locally enforceable conditions are applicable at all times.

I. Applicability

- A. The provisions of this category apply to stationary reciprocating internal combustion engines (RICE) at an area source of HAP emissions. [40 CFR 63.6585(c)]
- B. For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006. [40 CFR 63.6590(a)(1)(iii)]
- C. The Permittee must comply with the applicable emission limitations and operating limitations identified in this Section no later than May 3, 2013. [40 CFR 63.6595(a)(1)]
- D. The Permittee must comply with the requirements in Table 2d and any applicable operating limitations in Table 1b and Table 2b of Subpart ZZZZ for the existing stationary RICE located at an area source of HAP emissions. [40 CFR 63.6603(a)]

II. Emission Limitations and Standards

- A. The Permittee must comply with the following requirements, except during periods of startup: [40 CFR 63.6603 and Table 2d to Subpart ZZZZ of Part 63]
 - 1. Change oil and filter every 500 hours of operation or annually, whichever comes first; [4.a of Table 2d to Subpart ZZZZ of Part 63]
 - 2. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; [4.b of Table 2d to Subpart ZZZZ of Part 63]
 - 3. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [4.c of Table 2d to Subpart ZZZZ of Part 63]

- B. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in II.A.1 of this Section, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. [Footnote 2, Table 2d to Subpart ZZZZ of Part 63]
- C. The Permittee has the option of utilize an oil analysis program as described in IV.D of this permit in order to extend the specified oil change requirement in II.A.1 of this Section. [Footnote 2, Table 2d to Subpart ZZZZ of Part 63 & 40 CFR 63.6625(i)]
- D. The Permittee shall not cause, allow, or permit smoke to be emitted into the atmosphere from any stationary rotating machinery, smoke for any period greater than ten consecutive seconds that exceeds 40 percent opacity. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes. [PCC 17.12.185.A and PCC 17.16.340.E]
[Locally Enforceable Condition]
- E. The Permittee shall not cause or permit the effluent from any generator to have an average optical density equal to or greater than 60 percent when a cold diesel engine is started or when a diesel engine is accelerated under load as measured in accordance with EPA Reference Method 9. [PCC 17.12.185.A and PCC 17.16.040]
[Locally Enforceable Condition]
- F. The Permittee shall burn only the specified fuel allowed for each generator listed in this Section. The Permittee shall only fire fuel with a sulfur content less than 0.90 percent by weight. [PCC 17.12.190.B]
[Locally Enforceable and Material Permit Condition]

III. General Compliance Requirements

- A. The Permittee must be in compliance with the emission limitations and operating limitations in this Section at all times. [40 CFR 63.6605(a)]
- B. The Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, at all times, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by this Section have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Control Officer which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]

IV. Monitoring, Installation, Collection, Operation, and Maintenance Requirements

- A. The Permittee must operate and maintain the stationary RICE according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions [40 CFR 63.6625(e) and 40 CFR 63.6625(e)(2)]
- B. The Permittee must install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]
- C. The Permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in II.A.4 of this Section. [40 CFR 63.6625(h)]
- D. If the Permittee decides to utilize an oil analysis program in order to extend the specified oil change requirement in II.A.1 of this Section, the oil analysis must be performed at the same frequency specified for changing the oil in II.A.1 of this Section. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the Permittee is not required to change the oil. If any of the limits are exceeded, the Permittee must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the Permittee must change the oil within 2 days or before commencing operation, whichever is later. The Permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63.6603 and Table 2d to Subpart ZZZZ of Part 63]
- E. In order to demonstrate compliance with the opacity limitation in II.E of this Section, the Permittee shall conduct a visible emissions check on the exhaust stack of the generator at least quarterly if the generator is run during the quarter. For the purposes of this permit, a visible emissions check is verification that abnormal emissions are not present at the generator stack. [PCC 17.12.180.A.3.c]
[Locally Enforceable Condition]
- F. If the observer sees visible emissions from the generator that, on an instantaneous basis, appears to exceed 40 percent then the Permittee shall, if practicable, take a six-minute Method 9 observation of the plume. If the emissions are more than the referenced limitation and standard in II.E of this Section, then this occurrence shall be recorded and reported as an excess emission and a permit deviation. [PCC 17.12.180.A.3.c]
[Locally Enforceable Condition]
- G. When requested by the Control Officer, the Permittee shall perform visible emissions observations in accordance with EPA Reference Method 9, on the generator(s) to demonstrate compliance with the opacity standard in I.B.1 of this Section. [PCC 17.16.040]
[Locally Enforceable Condition]
- H. The Permittee shall be considered in compliance with the fuel limitation required in II.F of this Section by demonstrating that only the specified fuel allowed was fired in the subject stationary RICE. Such a demonstration may be made by making available to the Control Officer for his inspection, documentation, such as invoices or statements from the fuel supplier which verify the sulfur content of the fuel being piped and/or delivered. [PCC 17.12.180.A.3.c]
[Locally Enforceable Condition]

V. Demonstration of Continuous Compliance with the Emission Limitations and Operating Limitations

- A. The Permittee must demonstrate continuous compliance with each emission and operating limitation and work or management practice as required in II of this Section according to the following specified method: [40 CFR 63.6640(a) and Table 6 to Subpart ZZZZ of Part 63]
1. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or [Row 9 of Table 6 to Subpart ZZZZ of Part 63]
 2. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [Row 9 of Table 6 to Subpart ZZZZ of Part 63]
- B. The Permittee you must operate the emergency stationary RICE according to the requirements in paragraphs VI.B.1 through VI.B.3 of this Section. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs VI.B.1 through VI.B.3 of this Section, is prohibited. If the Permittee does not operate the engine according to the requirements in paragraphs VI.B.1 through VI.B.3 of this Section, the engine will not be considered an emergency engine under this Section and will need to meet all requirements for non-emergency engines. [40 CFR 63.6640(f)]
1. There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 63.6640(f)(i)]
 2. The Permittee may operate the subject emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The Permittee may petition the Control Officer for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. [40 CFR 63.6640(f)(ii)]
 3. The Permittee may operate the subject emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that the Permittee may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph IV.D.3 of this Section, as long as the power provided by the financial arrangement is limited to emergency power. [40 CFR 63.6640(f)(iii)]

VI. Reporting Requirements

- A. Unless the Control Officer has approved a different schedule for submission of reports under 40 CFR 63.10(a), the Permittee must submit each report according to the requirements in paragraphs VII.A.1 through VII.A.9 of this Section. [40 CFR 63.6650(b)]
1. For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified in I.C of this Section for the affected source and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for the affected source in I.C of this Section. [40 CFR 63.6650(b)(1)]
 2. For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for the affected source in I.C of this Section. [40 CFR 63.6650(b)(2)]
 3. For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. [40 CFR 63.6650(b)(3)]
 4. For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. [40 CFR 63.6650(b)(4)]
 5. For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A), the Permittee may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs VII.A.1 through VII.A.4 of this Section. [40 CFR 63.6650(b)(5)]
 6. For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for the affected source in I.C. of this Section (May 3, 2013) and ending on December 31. [40 CFR 63.6650(b)(6)]
 7. For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date (May 3, 2013) that is specified for the affected source in I.C. of this Section. [40 CFR 63.6650(b)(7)]
 8. For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31. [40 CFR 63.6650(b)(8)]
 9. For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31. [40 CFR 63.6650(b)(9)]
- B. The Compliance report must contain the information in paragraphs VII.B.1 through VII.B.5 of this Section.
1. Company name and address. [40 CFR 63.6650(c)(1)]
 2. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report. [40 CFR 63.6650(c)(2)]

3. Date of report and beginning and ending dates of the reporting period. [40 CFR 63.6650(c)(3)]
 4. If the Permittee had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the Permittee during a malfunction of an affected source to minimize emissions in accordance with III.B of this Section, including actions taken to correct a malfunction. [40 CFR 63.6650(c)(4) and 40 CFR 63.6605(b)]
 5. If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period. [40 CFR 63.6650(c)(5)]
- C. For each deviation from an emission or operating limitation that occurs for a stationary RICE where the Permittee is not using a CMS to comply with the emission or operating limitations in this Section, the Compliance report must contain the information in paragraphs VII.B.1 through VII.B.4 of this Section and the information in the following paragraphs VII.C.1 and VII.C.2 of this Section:
1. The total operating time of the stationary RICE at which the deviation occurred during the reporting period. [40 CFR 63.6650(d)(1)]
 2. Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken. [40 CFR 63.6650(d)(2)]
- D. Each affected source that has obtained a Title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority. [40 CFR 63.6650(f)]
- E. The Permittee shall promptly notify and submit written reports to the Control Officer of any instances of excess emissions or deviations from the permit requirements in accordance with the requirements of XI.A, Part A of this Permit. [PCC 17.12.040 and PCC 17.12.180.A.5]
[Locally Enforceable Condition]
- F. The Permittee shall report to the Control Officer any daily period during which the sulfur content of the fuel being fired in the diesel fired engines exceeds 0.8 percent. [PCC 17.16.340.J and PCC 17.12.180.A.5]
[Locally Enforceable Condition]

VII. Recordkeeping Requirements

- A. The Permittee must keep the records described in paragraphs VIII.A.1 through A.3 of this Section. [40 CFR 63.6655(a)]
- (1) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. [40 CFR 63.6655(a)(2)]
 - (2) Records of all required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63.6655(a)(4)]

- (3) Records of actions taken during periods of malfunction to minimize emissions in accordance with III.B of this Section, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
[40 CFR 63.6655(a)(5) and 40 CFR 63.6605(b)]
- B. The Permittee must keep the records required in IV.A and IV.B of this Section to show continuous compliance with each applicable emission or operating limitation. [40 CFR 63.6655(d)]
- C. The Permittee must keep records of the maintenance conducted on the existing stationary emergency RICE in order to demonstrate that the Permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to the Permittee's own maintenance plan.
[40 CFR 63.6655(e) and 40 CFR 63.6655(e)(3)]
- D. The Permittee must keep records of the hours of operation of the subject RICE that does not meet the standards applicable to non-emergency engine that is recorded through the non-resettable hour meter. The Permittee must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the subject engine is used for demand response operation, the Permittee must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.
[40 CFR 63.6655(g) and 40 CFR 63.6655(f)(2)]
- E. The Permittee's records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1). [40 CFR 63.6660(a)]
- F. As specified in 40 CFR 63.10(b)(1), the Permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
[40 CFR 63.6660(b)]
- G. The Permittee must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). [40 CFR 63.6660(c)]
- H. The Permittee shall retain records of visible emissions checks/observations. The Permittee shall record the date and time of the check, the name of the person conducting the check, the results of the check, and the type of corrective action taken (if required). All records shall be maintained for five years.
[PCC 17.12.180.A.4]
[Locally Enforceable Condition]
- I. In order to demonstrate compliance with the fuel limitation required in II.F of this Section, the Permittee shall maintain records of fuel supplier specifications which verify the sulfur content of the fuel, piped and/or as delivered. All records shall be maintained for five years.
[PCC 17.12.180.A.4]
[Locally Enforceable Condition]

[The Permittee shall be considered in compliance with this recordkeeping requirement by demonstrating that each engine was fired only by the specified fuel allowed, identified in Attachment 2 of this permit. Such a demonstration may be achieved by making available for the Control Officer's inspection, documentation, such as invoices or statements from the fuel supplier, showing that only the specified fuel was purchased for use in the equipment. Alternatively, the demonstration may be made by actual inspection of the equipment showing that the specified fuel is the only fuel supply plumbed to the equipment for firing.]

IX. Testing Requirements

[PCC 17.20.010]

[Locally Enforceable Conditions]

For purposes of demonstrating compliance, these test methods shall be used, provided that for the purpose of establishing whether or not the facility has violated or is in violation of any provision of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable federal requirements if the appropriate performance or compliance procedures or methods had been performed. [PCC 17.12.050]

A. Opacity

When required by the Control Officer, the Permittee shall perform EPA Method 9 visible emissions observations on the engines identified in this Section to demonstrate compliance with the opacity standard in II.E and II.F of this Section. [PCC 17.12.040.B]

B. Fuel Limitation

When required, to determine the sulfur content of the fuel being fired for purposes of the reporting requirement in IV.B of this Section, the following reference methods in the Arizona Testing Manual shall be used:

1. ASTM Method D-129-91 (Test Method for Sulfur in Petroleum Products) (General Bomb Method) for the sulfur content of liquid fuels.
2. ASTM Method D-1072-90 (Test Method for Total Sulfur in Fuel Gases) for the sulfur content of gaseous fuels.

C. Alternative Test Method

The Permittee may submit an alternate and equivalent test method(s) that is listed in 40 CFR Subpart 60, Appendix A, to the Control Officer in a test plan, for approval by the Control Officer. [PCC 17.12.045.D]

Part B

Section 8

Mine Activities

The provisions of this Section apply to the following affected facilities (emission points):

Emission Group	Process/Unit Description	Emission Point(s)
A	Mineral Tailings	Common To Tailing Location
	Vehicles on Unpaved Surfaces	VFMA-1, VFMA-2, VFMA-3 VFMA-4, VFMA-5, VFMA-6
	Operational Drilling and Blasting	OFMA-1 OFMA-2
	Demolition/ Renovation	Common to Tailing Location

I. Emission Limitations and Standards [Locally Enforceable Conditions]

A. Mineral Tailings

1. Within 90 days of issuance of the renewed permit, the Permittee shall submit a “Tailings Management Plan (TMP)” to be approved by the Control Officer. The TMP shall [PCC 17.12.180A.2]
 - a. Identify all active and inactive tailing dams (TDAM) and the activities/procedures implemented to control fugitive emissions from each TDAM.
 - b. Contain an operational strategy and inspection procedures for:
 - i. each TDAM (both active and inactive) to prevent excessive amounts of particulate matter from becoming airborne.
 - ii. controlling excessive amounts of particulate matter from becoming airborne during berm construction. Visible emissions checks to demonstrate compliance with the emission limitations and standards shall be no less than twice daily during berm building.
 - iii. controlling excessive amounts of particulate matter from becoming airborne during pipe lift operations.
 - iv. controlling excessive amounts of particulate matter from becoming airborne during pipe breaks and ensuing repair operations.
 - v. controlling excessive amounts of particulate matter from becoming airborne during periods when insufficient material is delivered to tailing dam(s).
 - c. Contain contingent control measures and practices that may be implemented to control and minimize fugitive emissions.. The Permittee is not expected to initiate control measures if the ground is reasonably wet to prevent excessive emissions.

- d. Contain a TDAM closure procedure to control fugitive particulate matter emissions from becoming airborne.
 - e. Contain monitoring and recordkeeping provisions to demonstrate compliance with the emission limitations and/or standards of this Section.
 - f. Upon receipt of the TMP, the Control Officer shall reopen the permit and review the TMP in accordance with III of Part A of this permit. Any future changes to the TMP shall follow procedures in XV of Part A of this permit.
2. The Control Officer may request that the Permittee make changes to the Tailings Management Plan should the Control Officer find that the plan fails to provide adequate air pollution control or that the air pollution control techniques are no longer effective in controlling fugitive emissions as identified in I.C of this Section. [PCC 17.12.180.A.2]
 3. Should the Permittee determine that revisions to the approved Tailings Management Plan are necessary; such revisions shall not become effective until the Permittee submits a description of the changes and a revised plan to the Control Officer for approval. The revised plan shall become effective upon review and approval by the Control Officer. [PCC 17.12.180.A.2]
 - a. Trial Control Measures

The Permittee may implement trial control measures in lieu of measures in the approved Tailings Management Plan. Notice shall be submitted to the Control Officer describing the proposed trial control measures and the measure(s) that will be replaced no later than two weeks prior to implementing the trial control measures. The Permittee shall not implement any trial control measures to which the Control Officer objects.
 - b. Additional/ Supplemental Control Measures

The Permittee is not prohibited from implementing additional/supplemental control measures beyond those specified in the Tailings Management Plan.
 4. The Permittee shall not 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, re-vegetation or such other measures as are approved by the Control Officer. [PCC 17.16.120.A]
 5. The Permittee shall not cause, suffer, allow, or permit construction of mineral tailings piles without taking reasonable precautions (i.e. wetting, chemical stabilization, application of wet tailings or re-vegetation) to minimize and control to ensure compliance with I.C.1.c of this Section. [PCC 17.16.120.B]

B. Vehicles on Unpaved Surfaces

1. No new unpaved service road or unpaved haul road shall be constructed unless dust will be suppressed after construction by intermittently oiling, watering, limiting access, or applying chemical dust suppressants to the road, in such a way that visible dust emissions caused by vehicular traffic on the road do not diffuse beyond the property line within which the emissions become airborne. The surfacing of roadways with asbestos tailings is prohibited. [SIP Rule 315.D and PCC 17.16.090.D and F]

2. Dust emissions from the transportation of materials shall be effectively controlled by covering stock loads in open-bodied trucks (when practicable), limiting vehicular speeds, or other equivalently effective controls. [PCC 17.16.100.C]

[Locally Enforceable Condition]

C. General Non-Point Fugitive Standards

1. The Permittee is responsible for controlling windblown dust, dust from haul roads, and dust emitted from land clearing, earthmoving, demolition, trenching, blasting, road construction, mining, and other activities, as applicable. [SIP Rule 224.A. and PCC 17.16.060.A]

- a. Until the area becomes permanently stabilized by paving, landscaping or otherwise, dust emissions shall be controlled by applying adequate amounts of water, chemical stabilizer, or other effective dust suppressant. [PCC 17.16.060.A.1]

[Locally Enforceable Condition]

- b. The Permittee shall not leave land in such a state that fugitive dust emissions (including windblown dust or dust caused by vehicular traffic on the area) would violate PCC 17.16.050 (I.C.1.c, I.C.1.d and I.C.2) of this Section. [PCC 17.16.060.A.2]

[Locally Enforceable Condition]

- c. No person shall cause, suffer, allow or permit operations or activities likely to result in excessive amounts of airborne dust without taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne. [SIP Rule 343, PCC 17.16.050]

- d. Except for sources located within the boundaries of the Tohono O'Odham, Pasqua Yaqui and San Xavier Indian Reservations, opacity of an emission from any non-point source (process/unit source of this Section), as measured in accordance with EPA Reference Method 9, shall not exceed 20 percent. [PCC 17.16.050.B.2]

[Locally Enforceable Condition]

2. No person shall cause, suffer, allow, or permit diffusion of visible emissions, including fugitive dust, beyond the property boundary line within which the emissions become airborne, without taking reasonably necessary and feasible precautions to control generation of airborne particulate matter. Sources may be required to cease temporarily the activity or operation which is causing or contributing to the emissions until reasonably necessary and feasible precautions are taken. Compliance with I.C.2 of this Section shall be satisfied by demonstrating compliance with Section "Mine Activities" of this permit. [PCC 17.16.050.D]

[Locally Enforceable Condition]

- a. Sources required to obtain an air quality permit under ARS § 49-426, § 49-480 or Rule PCC 17.12.470 may request to have the actions constituting reasonably necessary and feasible precautions approved and included as permit conditions. Compliance with such permit conditions shall be considered compliance with this Subsection (I.C of this Section). [PCC 17.16.050.D.1]

[Locally Enforceable Condition]

- b. Subsections I.C.1.c, I.C.1.d and I.C.2 of this Category shall not apply when wind speeds exceed twenty-five (25) miles per hour (using the Beaufort Scale of Wind-Speed Equivalents, or as recorded by the National Weather Service). This exception does not apply if control measures have not been taken or were not commensurate with the size or scope of the emission source [PCC 17.16.050.D.2]

[Locally Enforceable Condition]

c. Subsections (I.C.1.c, I.C.1.d and I.C.2) of this Section shall not apply to the generation of airborne particulate matter from undisturbed land. [PCC 17.16.050.D.3]

[Locally Enforceable Condition]

3. The Permittee shall not cause, suffer, allow, or permit organic or inorganic dust producing material to be stacked, piled or otherwise stored without taking reasonable precautions such as chemical stabilization, wetting, or covering to prevent excessive amounts of particulate matter from becoming airborne. [PCC 17.16.110.A]

[Locally Enforceable Condition]

4. Stacking and reclaiming machinery utilized at storage piles shall be operated at all times with a minimum fall of material and in such manner, or with the use of spray bars and wetting agents, as to minimize and control to ensure compliance with I.C.1.c, I.C.1.d and I.C.2 of this Section.

[PCC 17.16.110.B]

[Locally Enforceable Condition]

D. Demolition/ Renovation

The Permittee shall comply with all of the requirements of 40 CFR 61, Subpart M (National Emissions Standards for Hazardous Air Pollutants) - Asbestos. See also Part A XXI. [PCC 17.16.530.A.8]

[Locally Enforceable Condition]

II. Monitoring Requirements

A. Mineral Tailings

[Locally Enforceable Conditions]

1. The Permittee shall follow all the monitoring provisions identified in the approved Tailings Management Plan. [PCC 17.12.180.A.3]

2. The Permittee shall review the Tailings Management Plan annually for its effectiveness in controlling fugitive emissions. The review shall be submitted to the Control Officer by January 31 of each year (covering the period January 1st through December 31st of the previous year). Should the Permittee's review show that the plan is ineffective in controlling emissions, then the Permittee shall submit a revised Plan for approval by April 1 that shows improved methods/techniques of reducing emissions in order to minimize or prevent violations.

B. General Non-Point Fugitive

[Locally Enforceable Conditions]

To support compliance demonstration with the emission limitations and standards in I.C.1.d and I.C.2 of this Section, the Permittee shall:

1. Conduct biweekly visible emissions checks on each process/unit source of this Section. Regular visible emission checks shall be conducted no less than biweekly at all strategic lookouts at all other times (See Attachment 3 for lookout locations). [PCC 17.12.180.A.3]

Visual Observation Point	Location
M-1	Water Tank Hill (Mission Concentrator)
S-1	Water Tank Hill (South Mill)

2. If the observer sees visible emissions from the process/unit sources identified in this Section that, on an instantaneous basis, appears to exceed 20% opacity, then the Permittee shall, if practicable, take six-minute Method 9 observation of the emission source. If the emissions are more than the referenced limitation and standards within this Section, then this occurrence shall be recorded and reported as an excess emission and permit deviation. [PCC 17.16.040]
3. When required the Permittee shall perform visible emission observations in accordance with EPA Method 9, Appendix A in 40 CFR 60, to demonstrate compliance with the visibility limiting standards. [PCC 17.16.040.A.1]

III. Recordkeeping Requirement

[Locally Enforceable Conditions]

1. The Permittee shall record the results of the required monitoring as detailed in the approved Tailings Management Plan. [PCC 17.12.180.A.4]
2. The Permittee shall record the date and time of all visible emission checks, the name of the person conducting the check, the results of the check and the type of corrective action taken (if required). All records shall be maintained for five years. [PCC 17.12.180.A.4]
3. A copy of watering schedules, if developed and implemented to control the generation of airborne particulate matter shall be maintained at the facility on a per shift basis. All records shall be maintained for five years. [PCC 17.12.180.A.4]

IV. Reporting Requirements

Refer to Facility-wide Requirements in Section 12.

V. Testing Requirements

For purposes of demonstrating compliance, these test methods shall be used, provided that for the purpose of establishing whether or not the facility has violated or is in violation of any provision of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a facility would have been in compliance with applicable federal requirements if the appropriate performance or compliance procedures or methods had been performed. [PCC 17.20.010]

[Locally Enforceable Condition]

A. Opacity

When required, the Permittee shall perform EPA Method 9 visible emissions observations on the facility operations to demonstrate compliance with the opacity standard. [PCC 17.20.010]

[Locally Enforceable Condition]

B. Alternative Test Method

The Permittee may submit an alternate and equivalent test method(s) that is listed in 40 CFR Subpart 60, Appendix A, to the Control Officer in a test plan, for approval by the Control Officer. [PCC 17.12.045.D]

[Locally Enforceable Condition]

Part B

Section 9

Compliance Assurance Monitoring Plan

Part 64 of the Code of Federal Regulations (CFR), as defined in the Compliance Assurance Monitoring Plan (CAM) rule, requires monitoring, compliance certification, periodic reporting, and recordkeeping information collections by the Permittee for controlled pollutant specific emissions units (PSEU's) that have a pre-control potential to emit major amounts of regulated air pollutants.

The CAM plan is intended to provide a reasonable assurance of compliance with the applicable requirements (e.g. emission limits) for PSEU's that rely on control device equipment to achieve compliance.

I. Applicability

CAM is applicable to sources that meet the following criteria:

- the PSEU is located at a major source for which a Title V permit is required;
- the PSEU is subject to an emission limitation or standard for the applicable pollutant;
- the PSEU uses a control device to achieve compliance with a federally enforceable limit or standard;
- the potential pre-control emissions of any applicable pollutant(s) from the PSEU are at least 100 percent of the major source amount; and
- the PSEU is not otherwise exempt from CAM [40 CFR 64.2(b)]

The following emission sources at the facility have been identified as PSEU's

Equipment Unit ID	Emission Point	*ASARCO LLC Compliance Assurance Monitoring Plan #	Applicable Specific Conditions Identified in Part B, Section
362-5-3	SSOPN-1	1	4
362-6-3	SSOPN-2		
362-7-3	SSOPN-3		
311-E37	SSOPM-8	2	3
311-E38	SSOPM-9		
311-E39	SSOPM-10		
311-E40	SSOPM-11		
311-E78	SSOPM-12		
311-E79	SSOPM-13		
303-21	SSOPM-1	3	1
307-104	SSOPM-4	4	2
307-105	SSOPM-5		
307-106	SSOPM-6		
307-107	SSOPM-7		
10-108	SSOPS-1	5	5

* CAM Plan Version 1A (Dated March 2008)

II. General Requirements for Compliance Assurance Monitoring

A. Operational Standards

1. The Permittee shall maintain and operate all PSEU's identified in the table above, in a manner consistent with the provisions of this Section 9 and the approved ASARCO LLC CAM plan document. [PCC 17.12.185.A.2]

[Material Permit & Locally Enforceable Condition]

2. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the emission points are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The Permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [40 CFR 64.7(c)]

B. Response to Excursions or Exceedances

1. Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emission point (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown, or malfunction, and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action, or any necessary follow-up actions to return operations to within the indicator range, designated condition, or below applicable emission limitation or standard, as applicable. [40 CFR 64.7(d)(1)]
2. Determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation, and maintenance procedures and records, and inspection of the control device, associated capture system, and process. [40 CFR 64.7(d)(2)]

C. Approved Monitoring and Compliance Schedule

1. To provide a reasonable assurance of compliance with emission limitations or standards for the anticipated range of operations at a pollutant-specific emissions unit, the approved ASARCO LLC CAM plan document shall include monitoring criteria that satisfies 40 CFR 64.3 and 40 CFR 64.4. The Permittee shall submit monitoring 90 days after issuance of this permit, but in no case shall the Permittee submit revised monitoring more than 180 days from the date of issuance of the draft or final permit. [40 CFR 64.3, 40 CFR 60.4, 40 CFR 64.6(e)(2) and PCC 17.12.190.A]
2. If the Permittee does not submit the monitoring in accordance with the compliance schedule as required in II.C.1 of this Section or if the Control Officer disapproves the monitoring submitted, the source owner or operator shall be deemed not in compliance with 40 CFR Part 64, unless the Permittee successfully challenges the disapproval. [40 CFR 64.6(e)(3)]

D. Documentation of Need for Improved Monitoring.

After approval of monitoring under this part, if the Permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the Control Officer and, if necessary, submit a proposed modification to the part 70 or 71 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. [40 CFR 64.7(e)]

E. Reporting and Recordkeeping Requirements

Excursions shall be reported as required by Condition VII.A.1 of Part "A" of this permit. The report shall include, at a minimum, the following: [PCC 17.12.220.A.c.i]

[Locally Enforceable Condition]

1. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursion or exceedances, as applicable, and the corrective actions taken; and [40 CFR 64.9(a)(2)(i)]
2. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitoring downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable). [40 CFR 64.9(a)(2)(ii)]

F. Minimum data availability requirement

The Permittee is provided a 95% daily reading recordkeeping deviation allowance, which allows for up to 2 missed readings per month. [40 CFR 64.6(c)(4)]

**III. CAM Plan 1
North Circuit Operations - Primary and Secondary and Tertiary Crusher**

A. Background Information

1. Emission Unit(s):

Mission North Primary Crusher and Stockpile, Equipment Unit ID: 361-05, 361-58, 361-2A, 361-07,08,42,16,40,28,30,37,29,28. (Emission Points SSOPN-1 through SSOPN-3).

2. Applicable Specific Conditions, Emission Limit and Monitoring Requirements:

- i. Applicable specific conditions are identified in Part B, Section 4 of this Air Quality Operating Permit.
- ii. Emission Limit

a. Particulate Matter Emission Limitation

Process weight rate >60,000 lbs per hour (30 tons per hour)

$$E = 17.31P^{0.16}$$

where:

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

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

b. Opacity = 20 %

iii. Control Technology

Three wet scrubbers to remove particulate matter (PM) emissions. ASARCO LLC operates two of the three wet scrubbers at all times when the operations are active, supporting redundant control and allowing maintenance of a single system without affecting system operations. Equipment Unit ID: 362-5-3, 362-6-3 and 362-7-3. (Wet Scrubbers SSOPN-1 through SSOPN-3).

B. Monitoring Approach

The key elements of the monitoring approach are presented below:

1. Indicator(s) [40 CFR 64.3(a)(1)]

- a. Change in pressure of the gas stream through the scrubber.
- b. Change in scrubbing liquid flow rate to the scrubber.
- c. Visible Emissions.

2. Measurement Approach [40 CFR 64.3(a)(2)]

- a. The change in pressure of the gas stream flow through the scrubber shall be monitored on a continual basis and recorded once per day. Monitoring location: across the inlet and outlet ducts.
- b. The change in scrubbing liquid rate to the scrubber shall be monitored on a continual basis and recorded once per day. Monitoring location: measure at scrubber liquid inlet.
- c. Biweekly visual survey of visible emissions when the scrubbers are in operation.

3. Indicator Range [40 CFR 64.3(a)(2)]

[Material Permit Conditions]

- a. Average operating pressure differential and scrubber liquid flow rate measurements consistent with the manufacturer's recommended range or the most recent performance test:
 - i. Average Pressure Drop = 6.3" H₂O
Range (± 30%) = 4.1 – 7.9" H₂O
 - ii. Average Water Flow = 80.2 GPM
Range (± 30%) = 56.1 – 104.3 GPM

- b. 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 ± 1 " H₂O pressure and calibrated on an annual basis.
 - c. For the continuous measurement of the scrubbing liquid flow rate to the scrubber: The monitoring device must be certified by the manufacturer to be accurate within $\pm 5\%$ of the average water flow rate obtained during the most recent performance test and calibrated on an annual basis.
 - d. No visual emissions greater than 20 % opacity.
4. Performance Criteria [40 CFR 64.3(b)]
[Material Permit Conditions]
- a. The scrubber pressure differential and water flow rate are indicative of the overall operation and performance of the wet the scrubbers⁸. [40 CFR 64.3(b)(1)]
 - b. Incorporating the manufacturer's recommended operational set points and data documented from periodic performance testing, a relative acceptable operating range for each control device has been determined. The functional range for the two indicators (Section 9, III.B.3.a.i and III.B.3.a.ii of this permit) has been assigned $\pm 30\%$ tolerance from the average obtained. [40 CFR 64.3(b)(2) and (3)]
 - c. The pressure drop across the scrubber - measured with a differential pressure gauge - is operated continuously, manually measured and recorded daily or recorded continuously on strip chart or data acquisition system. [40 CFR 64.3(b)(3)]
 - d. The scrubber flow rate (measured with a flow gauge indicator) is operated continuously, manually measured and recorded daily or recorded continuously on strip chart or data acquisition system. [40 CFR 64.3(b)(3)]
 - e. Two of the three scrubber systems shall be in operation at all times supporting parallel control. Measurements are made at the emission point.
5. Excursion Determinations
- a. Pressure Drop Excursion Determination
Events when the scrubber pressure drop (or gain) differs by more than 30 percent from the average operating level obtained during the most recent performance test on the wet scrubbers constitute an excursion event. Excursions trigger an inspection and corrective action. Operating level and acceptable ranges are established from stack test and operation data and can be adjusted as new data is developed and periodic testing, where required, is completed. [40 CFR 64.6(c)(2)]

⁸ Decrease in pressure differential indicates decrease in gas or liquid flow or poor liquid distribution; increase in pressure differential indicates clogging or increased gas flow.

b. Scrubber Flow Rate Excursion Determination

Events when the water flow rate is outside the operating range of 56.1 – 104.3 gallons per minute constitute an excursion event. Excursions trigger an inspection and corrective action. Operating level and acceptable ranges are established from stack test and operation data.

[40 CFR 64.6(c)(2)]

c. Opacity Excursion Determination

Events when the visible emission is greater than 20 % opacity constitute an excursion event. Excursions trigger an inspection and corrective action.

[40 CFR 64.6(c)(2)]

IV. CAM Plan 2

Mission Circuit Fine Ore Bin (Mission Concentrator)

A. Background Information

1. Emission Unit(s):

Ore from the final crushing processes is conveyed to the Mission Mill and Fine Ore Bin where it is stored for further processing in the Mill/Concentrator. A 2,500 TPH Cimetta Engineering Tripper Car (Equipment Unit ID: M311-E45) distributes material evenly across a 48” belt conveyor (Equipment Unit ID: M307-E44) in the building to the fine ore bin. Emissions from the bin and the distribution of material from the tripper car are controlled by one (1) 3,400 cfm Wheelabrator pulse-jet baghouse (Emission Point: SSOPM-8, Equipment Unit ID: M311-E37) and five (5) FARR Cartridge Units (Emission Points: SSOPM-9 through 13, Equipment Unit ID’s : M311-E38, E39, E40, E78 and E79).

2. Applicable Specific Conditions, Emission Limit and Monitoring Requirements:

i. Applicable specific conditions are identified in Section 3 of this Air Quality Operating Permit.

ii. Emission Limit.

a. Particulate Matter Emission Limitation

<0.05 grams per dry standard cubic meter

b. Opacity = 7 % (at any stack except wet scrubbers); ≤10% process fugitives.

iii. Control Technology:

One pulse-jet baghouse operated under negative pressure (Emission Point: SSOPM-8, Equipment Unit ID: M311-E37) and five (5) FARR Cartridge Units (Emission Point’s: SSOPM-9 through 13, Equipment Unit ID’s : M311-E38, E39, E40, E78 and E79). ASARCO LLC currently uses all six control systems for dust control of the Tripper Deck.

All control systems are in operation when the tripper car is active and ore is being transferred. Only the Wheelabrator Unit has a stack that emits to the atmosphere, the FARR Cartridge Units do not have a stack discharge and are vented inside the building under normal operations.

B. Monitoring Approach

The key elements of the monitoring approach are presented below:

1. Indicator(s) [40 CFR 64.3(a)(1)]
 - a. Change in pressure of the gas stream through the baghouse.
 - b. Visible emissions.
2. Measurement Approach [40 CFR 64.3(a)(2)]
 - a. The change in pressure of the gas stream through the baghouse shall be monitored on a continual basis and recorded once per day.
 - b. Visual survey of visible emissions when the baghouse is in operation. Install, calibrate, maintain and operate a monitoring device for the continuous measurement of the change in pressure of the gas stream across the baghouse.
3. Indicator Range [40 CFR 64.3(a)(2)]
 - a. Average operating pressure drop measurements through the baghouse consistent with the manufacturer's recommended range or the most recent performance test.
 - b. For the continuous measurement of the change in pressure of the gas stream through the baghouse: The monitoring device must be certified by the manufacturer to be accurate within $\pm 1''$ H₂O pressure and calibrated on an annual basis. [40 CFR 64.3(b)(3)]
[Material Permit Condition]
 - c. No visual emissions greater than 7% (at any stack except wet scrubbers) and 10% process fugitives. Conduct at least one EPA Method 9 opacity test annually by monitoring the emissions from the exterior of the building housing the Mission Mill/Concentrator housing the emission sources defined under this CAM Plan 2 (Emission point numbers: SSOPM-9 through SSOPM-13, Equip ID: M311-E38 through M11-E40, M311-E78 and M311-E79).
4. Performance Criteria [40 CFR 64.3(b)]
 - a. The pressure drop across the baghouse - measured with a differential pressure gauge - is operated continuously, manually measured and recorded daily or recorded continuously on strip chart or data acquisition system. Measurements are made at the emission point. [40 CFR 64.3(b)(3)]
[Material Permit Condition]
 - b. All control systems shall be in operation when the tripper car is active and the ore is being transferred.

C. Monitoring Requirements

1. The monitoring device must be certified by the manufacturer to be accurate within $\pm 1''$ H₂O pressure and calibrated on an annual basis. [40 CFR 64.3(b)(3)]
[Material Permit Condition]

2. Conduct biweekly visual survey of visible emissions when the baghouse is in operation. [40 CFR 64.3(b)(4)(iii)]
3. Conduct at least one EPA Method 9 opacity test annually for stack M311-E37 from the baghouse defined under this CAM plan.

V. CAM Plan 3
Mission Circuit Operations Primary Crusher System

A. Background Information

1. Emission Unit(s):

Mission Primary Crushing and Conveyance System, Equipment Unit ID: M303-E3, M303-E4, M303-E3 and M309-E1. (Emission Point SSOPM-1).

2. Applicable Specific Conditions, Emission Limit and Monitoring Requirements:

i. Applicable specific conditions are identified in Section 1 of this Air Quality Operating Permit.

ii. Emission Limit

a. Particulate Matter Emission Limitation

Process weight rate >60,000 lbs per hour (30 tons per hour)

$$E = 17.31P^{0.16}$$

where:

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

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

b. Opacity = 20 %

iii. Control Technology

One wet scrubber, Equipment ID: 303-21 (Emission Point: SSOPM-1). The wet scrubber system is operated at all time the crushing and conveyance system is active.

B. Monitoring Approach

The key elements of the monitoring approach are presented below:

1. Indicator(s)

[40 CFR 64.3(a)(1)]

a. Change in pressure of the gas stream through the scrubber.

b. Change in scrubbing liquid flow rate to the scrubber.

c. Visible Emissions

2. Measurement Approach [40 CFR 64.3(a)(2)]
- a. The change in pressure of the gas stream flow through the scrubber shall be monitored on a continual basis and recorded once per day. Monitoring location: across the inlet and outlet ducts.
 - b. The change in scrubbing liquid rate to the scrubber shall be monitored on a continual basis and recorded once per day. Monitoring location: measure at scrubber liquid inlet.
 - c. Biweekly visual survey of visible emissions when the scrubbers are in operation.
3. Indicator Range [40 CFR 64.3(a)(2)]
[Material Permit Conditions]
- a. Average operating pressure differential and scrubber liquid flow rate measurements consistent with the manufacturer's recommended range or the most recent performance test:
 - i. Average Pressure Drop = 5.3" H₂O
Range (± 30%) = 3.7 – 6.9" H₂O
 - ii. Average Water Flow = 70.9 GPM
Range (± 30%) = 49.6 – 92.2 GPM
 - b. 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 ± 1" H₂O pressure and calibrated on an annual basis.
 - c. For the continuous measurement of the scrubbing liquid flow rate to the scrubber: The monitoring device must be certified by the manufacturer to be accurate within ± 5% of the average water flow rate obtained during the most recent performance test and calibrated on an annual basis.
 - d. No visual emissions greater than 20% opacity.
4. Performance Criteria [40 CFR 64.3(b)]
[Material Permit Conditions]
- a. The scrubber pressure differential and water flow rate are indicative of the overall operation and performance of wet the scrubber. Decrease in pressure differential indicates decrease in gas or liquid flow or poor liquid distribution; increase in pressure differential indicates clogging or increased gas flow. [40 CFR 64.3(b)(1)]
 - b. Incorporating the manufacturer's recommended operational set points and data documented from periodic performance testing, a relative acceptable operating range for each control device has been determined. The functional range for the two indicators (Section 9, V.B.3.a.i and V.B.3.a.ii of this permit) has been assigned ± 30% tolerance from the average obtained. [40 CFR 64.3(b)(2) and (3)]
 - c. The pressure drop across the scrubber - measured with a differential pressure gauge - is operated continuously, manually measured and recorded daily or recorded continuously on strip chart or data acquisition system. [40 CFR 64.3(b)(3)]

- d. The scrubber flow rate (measured with a flow gauge indicator) is operated continuously, manually measured and recorded daily or recorded continuously on strip chart or data acquisition system. [40 CFR 64.3(b)(3)]
 - e. The wet scrubber system shall be in operation at all times when the crushing and conveyance system is active.
5. Excursions Determinations
- a. Pressure Drop Excursion Determination
Events when the scrubber pressure drop (or gain) differs by more than 30 percent from the average operating level obtained during the most recent performance test on the wet scrubbers constitute an excursion event. Excursions trigger an inspection and corrective action. Operating levels and acceptable ranges established from a stack test can be adjusted as new data is developed and periodic testing, where required, is completed. [40 CFR 64.6(c)(2)]
 - b. Scrubber Flow Rate Excursion Determination
Events when the water flow rate is outside the operating range of 49.6 – 92.2 gallons per minute. Excursions trigger an inspection and corrective action. Operating level and acceptable ranges are established from stack test and operation data. [40 CFR 64.6(c)(2)]
 - c. Opacity Excursion Determination
Events when the visible emission is greater than 20 % opacity constitute an excursion event. Excursions trigger an inspection and corrective action. [40 CFR 64.6(c)(2)]

**VI. CAM Plan 4
Mission Circuit Operations Secondary and Tertiary Crusher System**

A. Background Information

1. Emission Unit(s):
Operations Secondary / Tertiary Crushing. Equipment Unit ID: M309-E2, M309-E6, M301-E1, M301-E2, 624-1, 624-2, M307-E5, M307-E6. (Emission Points SSOPM-4 through SSOPM-7).
2. Applicable Specific Conditions, Emission Limit and Monitoring Requirements:
 - i. Applicable specific conditions are identified in Part B, Section 2 of this Air Quality Operating Permit.
 - ii. Emission Limit
 - a. Particulate Matter Emission Limitation.
<0.05 grams per dry standard cubic meter
 - b. Opacity = 20 % at any stack; ≤ 10 % process fugitives.

iii. Control Technology:

Four wet scrubbers to control particulate matter (PM) emissions. ASARCO LLC operates three of the four scrubber systems at all times when operations are active, supporting redundant control and allowing maintenance of a single system without affecting system operations. Equipment Unit ID: 307-104 through 307-107. (Wet Scrubbers SSOPM-4 through SSOPM-7).

B. Monitoring Approach

The key elements of the monitoring approach are presented below:

1. Indicator(s) [40 CFR 64.3(a)(1)]
 - a. Change in pressure of the gas stream through the scrubber.
 - b. Change in scrubbing liquid flow rate to the scrubber.
 - c. Visible Emissions.
2. Measurement Approach [40 CFR 64.3(a)(2)]
 - a. The change in pressure of the gas stream flow through the scrubber shall be monitored on a continual basis and recorded once per day. Monitoring location: across the inlet and outlet ducts.
 - b. The change in scrubbing liquid rate to the scrubber shall be monitored on a continual basis and recorded once per day. Monitoring location: measure at scrubber liquid inlet.
 - c. Biweekly visual survey of visible emissions when the scrubbers are in operation.
3. Indicator Range [40 CFR 64.3(a)(2)]
[Material Permit Conditions]
 - a. Average operating pressure differential and scrubber liquid flow rate measurements consistent with the manufacturer's recommended range or the most recent performance test:
 - i. Average Pressure Drop = 7.4" H₂O
Range (± 30%) = 5.2 – 9.6" H₂O
 - ii. Average Water Flow = 72.1 GPM
Range (± 30%) = 50.5 – 93.7 GPM
 - b. 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 ± 1" H₂O pressure and calibrated on an annual basis. [40 CFR 64.3(b)(3)]
 - c. For the continuous measurement of the scrubbing liquid flow rate to the scrubber: The monitoring device must be certified by the manufacturer to be accurate within ± 5% of the average water flow rate obtained during the most recent performance test and calibrated on an annual basis.

- d. No visual stack emissions greater than 20%; $\leq 10\%$ process fugitives. Conduct at least one EPA Method 9 opacity test annually for each stack from the sources defined under this CAM plan (Equip ID #M311-E37 through M11-E40, M311-E78 and M11-E79).

4. Performance Criteria

[40 CFR 64.3(b)]

[Material Permit Conditions]

- a. The scrubber pressure differential and water flow rate are indicative of the overall operation and performance of wet the scrubbers. Decrease in pressure differential indicates decrease in gas or liquid flow or poor liquid distribution; increase in pressure differential indicates clogging or increased gas flow. [40 CFR 64.3(b)(1)]
- b. Incorporating the manufacturer's recommended operational set points and data documented from periodic performance testing, a relative acceptable operating range for each control device has been determined. The functional range for the two indicators (III.B.3.a.i and III.B.3.a.ii of this Section) has been assigned $\pm 30\%$ tolerance from the average obtained. [40 CFR 64.3(b)(2) and (3)]
- c. The pressure drop across the scrubber - measured with a differential pressure gauge - is operated continuously, manually measured and recorded daily or recorded continuously on strip chart or data acquisition system. [40 CFR 64.3(b)(3)]
- d. The scrubber flow rate (measured with a flow gauge indicator) is operated continuously, manually measured and recorded daily or recorded continuously on strip chart or data acquisition system. [40 CFR 64.3(b)(3)]
- e. Three of the four scrubber systems shall be in operation at all times. Measurements are made at the emission point.

5. Excursion Determinations

a. Pressure Drop Excursion Determination

Events when the scrubber pressure drop (or gain) differs by more than 30 percent from the average operating level obtained during the most recent performance test on the wet scrubbers constitute an excursion event. Excursions trigger an inspection and corrective action. Operating level and acceptable ranges are established from stack test and operation data and can be adjusted as new data is developed and periodic testing, where required, is completed. [40 CFR 64.6(c)(2)]

b. Scrubber Flow Rate Excursion Determination

Events when the water flow rate is outside the operating range of 50.5 – 93.7 gallons per minute constitute an excursion event. Excursions trigger an inspection and corrective action. Operating level and acceptable ranges are established from stack test and operation data. [40 CFR 64.6(c)(2)]

c. Opacity Excursion Determination

Events when the visible emission is greater than 20% constitute an excursion event. Excursions trigger an inspection and corrective action. [40 CFR 64.6(c)(2)]

VII. CAM Plan 5
South Circuit Operations Primary Crusher System

A. Background Information

1. Emission Unit(s):

Mission South Primary Crusher. Equipment Unit ID: 10-101 (Emission Point SSOPS-1).

2. Applicable Specific Conditions, Emission Limit and Monitoring Requirements:

i. Applicable specific conditions are identified in Section 5 of this Air Quality Operating Permit.

ii. Emission Limit

a. Particulate Matter Emission Limitation

$$E < 17.31 P^{0.16}$$

Where E = maximum, allowable particulate emission rate in pounds per mass hour.
P = the process weight rate in tons-mass per hour.

b. Opacity = 20 %.

iii. Control Technology:

One wet scrubber. Equipment ID: 10-108 (Emission Point SSOPS-1).

B. Monitoring Approach

The key elements of the monitoring approach are presented below:

1. Indicator(s)

[40 CFR 64.3(a)(1)]

- a. Change in pressure of the gas stream through the scrubber.
- b. Change in scrubbing liquid flow rate to the scrubber.
- c. Visible Emissions.

2. Measurement Approach

[40 CFR 64.3(a)(2)]

- a. The change in pressure of the gas stream flow through the scrubber shall be monitored on a continual basis and recorded once per day. Monitoring location: across the inlet and outlet ducts.
- b. The change in scrubbing liquid rate to the scrubber shall be monitored on a continual basis and recorded once per day. Monitoring location: measure at scrubber liquid inlet.
- c. Visual survey of visible emissions when the scrubber is in operation.

3. Indicator Range

[40 CFR 64.3(a)(2)]

[Material Permit Conditions]

- a. Average operating pressure differential and scrubber liquid flow rate measurements consistent with the manufacturer's recommended range or the most recent performance test:
 - i. Average Pressure Drop = 5.1" H₂O
Range ($\pm 10\%$) = 3.6 – 6.6" H₂O
 - ii. Average Water Flow = 29.9 GPM
Range ($\pm 10\%$) = 20.9 – 38.9 GPM
- b. 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 ± 1 " H₂O pressure and calibrated on an annual basis.
- c. For the continuous measurement of the scrubbing liquid flow rate to the scrubber: The monitoring device must be certified by the manufacturer to be accurate within $\pm 5\%$ of the average water flow rate obtained during the most recent performance test and calibrated on an annual basis.
- d. No visual emissions greater than 20%. Conduct at least one EPA Method 9 opacity test annually from the source defined under this CAM plan (Equipment ID: 10-108 (Emission Point SSOPS-1)).

4. Performance Criteria

[40 CFR 64.3(b)]

[Material Permit Conditions]

- a. The scrubber pressure differential and water flow rate are indicative of the overall operation and performance of wet the scrubbers. Decrease in pressure differential indicates decrease in gas or liquid flow or poor liquid distribution; increase in pressure differential indicates clogging or increased gas flow. [40 CFR 64.3(b)(1)]
- b. Incorporating the manufacturer's recommended operational set points and data documented from periodic performance testing, a relative acceptable operating range for each control device has been determined. The functional range for the two indicators (Section 9, III.B.3.a.i and III.B.3.a.ii of this permit) has been assigned $\pm 30\%$ tolerance from the average obtained. [40 CFR 64.3(b)(2) and (3)]
- c. The pressure drop across the scrubber - measured with a differential pressure gauge - is operated continuously, manually measured and recorded daily or recorded continuously on strip chart or data acquisition system. [40 CFR 64.3(b)(3)]
- d. The scrubber flow rate (measured with a flow gauge indicator) is operated continuously, manually measured and recorded daily or recorded continuously on strip chart or data acquisition system. [40 CFR 64.3(b)(3)]
- e. The wet scrubber system shall be in operation at all times when the crushing and conveyance system is active. [PCC 17.12.180.A.2]

5. Excursions Determinations

a. Pressure Drop Excursion Determination

Events when the scrubber pressure drop (or gain) differs by more than 30 percent from the historic monitoring data presented in the ASARCO LLC CAM Plan Version 1A (Dated March 2008) or the average operating level obtained from the during the most recent performance test on the wet scrubber constitute an excursion event. Excursions trigger an inspection and corrective action. Operating levels and acceptable ranges established from a stack test can be adjusted as new data is developed and periodic testing, where required, is completed.

[40 CFR 64.6(c)(2)]

b. Scrubber Flow Rate Excursion Determination

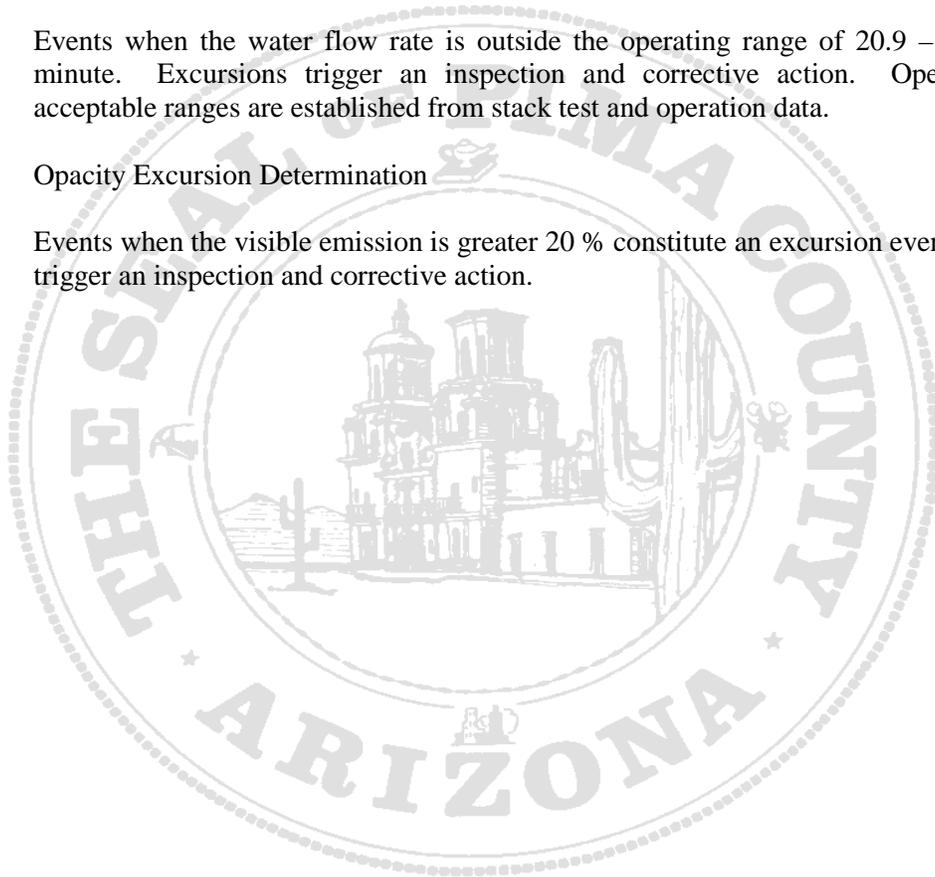
Events when the water flow rate is outside the operating range of 20.9 – 38.9 gallons per minute. Excursions trigger an inspection and corrective action. Operating level and acceptable ranges are established from stack test and operation data.

[40 CFR 64.6(c)(2)]

c. Opacity Excursion Determination

Events when the visible emission is greater 20 % constitute an excursion event. Excursions trigger an inspection and corrective action.

[40 CFR 64.6(c)(2)]



Part B

Section 10

By-Product (Molybdenum) Plant

The provisions of this Section apply to the following affected facilities (emission points)

Emission Group	Process/Unit Description	Emission Point Number(s)
A	Material Handling (Screw Dryers)	353-113 353-114
B	Air Pollution Control Device (Wet Scrubber)	SSMP-1

I. Emission Limitations and Standards

The provisions of this Section are listed corresponding to each emission group above.

A. Emission Group A [Locally Enforceable Conditions]

1. The Permittee shall not cause, or permit the effluent from a single emission point, multiple emission points, or fugitive emissions source to have an average optical density greater than 20 percent opacity, that is attainment or unclassifiable for each particulate matter standard except as provided in Subsections PCC 17.16.130.D and E.

[SIP Rule 321, PCC 17.16.040, PCC 17.16.050.B and PCC 17.16.130.B]

2. The Permittee shall not cause, allow or permit to be discharged into the atmosphere from any dryer, the operating temperature of which exceeds 700 F, reduced sulfur in excess of ten percent of the sulfur entering the process as feed. Reduced sulfur includes sulfur equivalent from all sulfur emissions including sulfur dioxide, sulfur trioxide, and sulfuric acid.

[PCC 17.16.360.E]

[Locally Enforceable Condition]

3. A continuous monitoring system for measurement sulfur dioxide emissions shall be installed, calibrated, maintained and operated by the Permittee where dryers are not expected to achieve compliance with the standard under A.2 of this Section 10.

[PCC 17.16.360.G]

[Locally Enforceable Condition]

B. Emission Group B [Locally Enforceable Conditions]

1. The Permittee shall not cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any process source subject to the provisions of this Subsection in total quantities in excess of the amounts calculated by the following equation:

[PCC 17.16.360.B.2]

$$E = 17.31P^{0.16}$$

where:

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

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

2. The actual values shall be calculated from the equation and rounded off to two decimal places. [PCC 17.16.360.C]
3. For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter. [PCC 17.16.360.D]
4. The Permittee shall not cause, allow or permit the effluent from wet scrubber stack SSMP-1 to have an average optical density equal to or greater than 20 percent opacity, that is in an attainment or unclassifiable area for each particulate matter standard except as provided in Subsections PCC 17.16.130.D and E. [SIP Rule 321, PCC 17.16.040, PCC 17.16.050.B and PCC 17.16.130.B]

II. Monitoring Requirements

A. Emission Group A [Locally Enforceable Conditions]

1. When the Molybdenum Plant is operating, the Permittee shall demonstrate compliance with the opacity limitation in I.A of this Section 10 by monitoring the emissions from the exterior of the building housing⁹ the Molybdenum Plant biweekly (every two weeks). [PCC 17.12.180.A.3.c]
2. If the observer sees a plume from the exterior of the building housing the Molybdenum Plant that, on an instantaneous basis, appears to exceed 20 percent opacity, then the Permittee shall take a six-minute Method 9 observation of the plume. If the emissions are 20 percent opacity or more this shall be recorded and reported as an excess emission and permit deviation. [PCC 17.12.180.A.3.c]
3. Upon reaching an operating temperature in any dryer after startup greater than 700 F, the Permittee shall monitor the reduced sulfur emissions entering the process as feed and discharged into the atmosphere through the air pollution control device. [PCC 17.12.180.A.3]
4. Upon reaching operating temperature after startup, the Permittee shall monitor and record temperature screw dryers (equipment ID: 353-113 and 353-114 as indicated by thermostate. If the recorded temperature reaches the upper range of the monitoring device, said device shall be replaced with a monitor of greater range. [PCC 17.12.180.A.2]

B. Emission Group B [Locally Enforceable Conditions]

1. Wet Scrubber
 - a. The Permittee shall demonstrate compliance with the opacity limitation in I.B.4 of this Section 10 by monitoring the emissions from the Air Pollution Control Device (emission point SSMP-1) biweekly (every two weeks). [PCC 17.12.180.A.3.c]

⁹ EPA Determination Detail Control #0500092. See the Technical Support Document accompanying this permit.

- b. If the observer sees a plume from emission points SSMP-1 that, on an instantaneous basis, appears to exceed 20 percent opacity, then the Permittee shall take a six-minute Method 9 observation of the plume. If the emissions are 20 percent opacity or more this shall be recorded and reported as an excess emission and permit deviation. [PCC 17.12.180.A.3.c]

III. Recordkeeping Requirements

[Locally Enforceable Conditions]

- A. The Permittee shall record the daily process rates and hours of operation of all material handling facilities. [PCC 17.16.360.F]
- B. Upon reaching an operating temperature in any dryer after startup greater than 700 F, the Permittee shall record the reduced sulfur emissions entering the process as feed and discharged into the atmosphere through the air pollution control device. [PCC 17.12.180.A.4]

IV. Reporting Requirements

Refer to the General Facility-wide Reporting Requirements

V. Testing Requirements

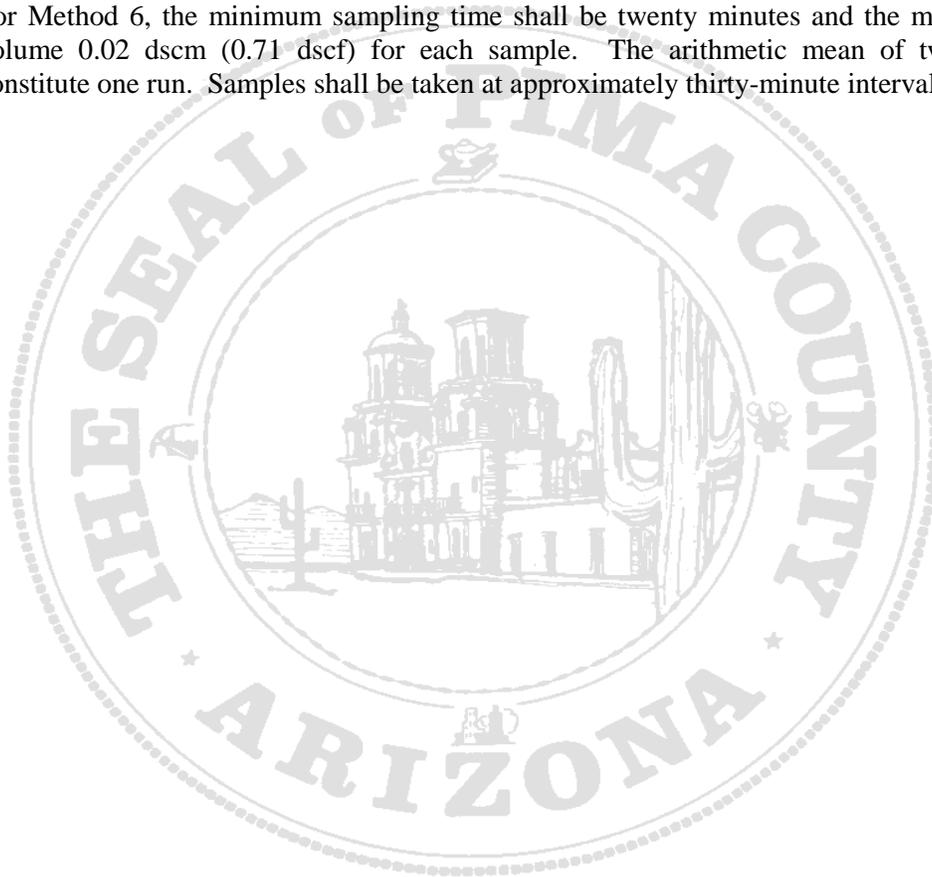
[PCC 17.16.360]

[Locally Enforceable Conditions]

For purposes of demonstrating compliance, these test methods shall be used, provided that for the purpose of establishing whether or not the facility has violated or is in violation of any provision of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a facility would have been in compliance with applicable federal requirements if the appropriate performance or compliance procedures or methods had been performed. [PCC 17.20.010]

- A. The Permittee shall determine compliance with the particulate matter standards in I.B.1 of this Section as follows: [PCC 17.12.180.A.3]
- B. The Permittee shall conduct a performance test for particulate matter at least once during the term of this permit on at least one control device in each of the groups listed in the 'schedule of performance tests' identified in Attachment 4 of this Permit. The provisions of EPA Reference Method 5 or 17 shall be used to conduct the test. [PCC 17.20.010]
- C. The test methods and procedures required by this Section 10 are as follows: [PCC 17.16.360.H]
 1. The reference methods in 40 CFR 60, Appendix A shall be used to determine compliance with the standard prescribed in this Section as follows:
 - a. Method 4 and 5 for the concentration of particulate matter and the associated moisture content;
 - b. Method 1 for sample and velocity traverses;
 - c. Method 2 for velocity and volumetric flow rate;
 - d. Method 3 for gas analysis and calculation of excess air, using the integrated sample technique;
 - e. Method 6 for concentration of SO₂;

2. For Method 5, Method 1 shall be used to select the sampling site and the number of traverse sampling points. The sampling time for each run shall be at least 60 minutes and the minimum sampling volume shall be 0.85 dscm (thirty dscf), except that smaller sampling times or volumes, when necessitated by process variables of other factors, may be approved by the control officer. The probe and filter holder heating systems in the sampling train shall be set to provide a gas temperature no greater than one hundred sixty degrees Celsius (three hundred twenty degrees Fahrenheit).
3. For Method 6, the sampling site shall be the same as that selected for Method 5. The sampling point in the duct shall be at the centroid of the cross Section or at a point no closer to the walls than one meter (3.28 ft.). For Method 6, the sample shall be extracted at a rate proportional to the gas velocity at the sampling point.
4. For Method 6, the minimum sampling time shall be twenty minutes and the minimum sampling volume 0.02 dscm (0.71 dscf) for each sample. The arithmetic mean of two samples shall constitute one run. Samples shall be taken at approximately thirty-minute intervals.



Part B

Section 11

Gasoline Dispensing Facilities

The provisions of this Section apply to any Gasoline Dispensing Facility (GDF), subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) authorized under Title 17 of the Pima County Code.

I. EMISSION LIMITS AND STANDARDS

Air Pollution Controls

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)]

[Material Permit Condition]

1. Minimize gasoline spills;
2. Clean up spills as expeditiously as practicable;
3. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use. Portable gasoline containers that meet the requirement of 40 CFR 59, subpart F, are considered acceptable for compliance; [40 CFR 63.11116(d)]
4. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/waste separators.
5. A stationary tank, reservoir, or other container which has a capacity of at least 250 gallons but less than or equal to 40,000 gallons which is used for storing gasoline must be equipped with a submerged fill pipe. [SIP Rule 314.A.1.a and PCC 17.16.230.B]

II. MONITORING AND RECORDKEEPING REQUIREMENTS

A. Operational Limitations

1. The Permittee must, at all times, including periods of startup, shutdown, and malfunction, operate and maintain the GDF, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 CFR 63.6(e)(1)(i) & 40 CFR 63, Subpart CCCCC, Table 3]
2. An affected source shall provide proof of throughput upon request by the Control Officer. [40 CFR 63.11111(e)]
3. **Yearly** throughput shall be a **365-day** rolling total, calculated by summing the volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the current day, plus the total volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the previous 364 days. **Monthly** throughput shall be calculated using the **yearly** throughput and dividing that sum by 12. [40 CFR 63.11132]

[Material Permit Condition]

B. Air Pollution Controls

1. The Permittee shall annually inspect the gasoline storage tank's submerged fill device. The inspection shall be used to determine whether the submerged fill device is in good working order, according to good modern practices and any available industry practices or recommendations.

[PCC 17.12.185.A.3.c]

[Material Permit Condition]

2. The Permittee shall annually inspect all pumps compressors, pipes, hoses mechanical seals or other equipment storing, handling, conveying or controlling VOCs and HAPs. The inspections shall be used to determine whether all equipment is in good working order according to good modern practices and any available manufacturer's recommendations.

[PCC 17.12.185.A.3.c]

[Material Permit Condition]

C. Recordkeeping

1. Recordkeeping to document throughput should date back to January 10, 2008 for existing sources. These records shall be kept for a period of five (5) years.

[40 CFR 63.1111(e)]

2. The Permittee shall record the results of inspections in II.B.1 & 2 of this Section in a log showing the following information:

[PCC 17.12.185.A.3.c]

[Material Permit Condition]

- a. Identification of the device inspected;
- b. The date of the inspection;
- c. The results of the inspection;
- d. Any corrective action taken as a result of the inspection.

3. All other records required by this permit shall be maintained for a minimum of five (5) years including all records that may be necessary to demonstrate compliance with Pima County Code Title 17.

[PCC 17.12.185.A.4.b]

III. REPORTING REQUIREMENTS

Refer to the General Facility-wide Reporting conditions in Section 12.

IV. TESTING REQUIREMENTS

No Requirements

Part B

Section 12

General Facility-Wide Reporting Conditions

The provisions of this Section apply to all regulated sources (and conditions) in this permit.

A. Excess Emissions and Permit Deviation Reporting [PCC 17.12.180.A.5.b & 17.12.180.E.3.d]

The Permittee shall report to the Control Officer any emissions in excess of the limits (as defined in 17.04.340, "Excess emissions") established by this Section within 24 hours of the time the Permittee first learned of the excess emissions occurrence. The Permittee shall report other deviations from permit requirements in this Section within two working days of the time the Permittee first learned of the occurrence of the deviation. (See XI of Part A for detailed information on these two reports).

B. Semiannual Reports of Required Monitoring

The Permittee shall submit semiannual reports of all monitoring requirements within Part B of this permit on January 31st (covering the period July 1st through December 31st) and July 31st (covering the period January 1st through June 30th) of each year. The first semiannual report due after permit issuance may not cover a 6-month period. All instances of excess emissions and deviations from permit requirements as defined in XI of Part A shall be clearly identified in such reports. [40 CFR 70.8 and PCC 17.12.180.A.5.a]

C. Compliance Certification Reporting [PCC 17.12.220.A.2]

1. The Permittee shall submit an annual compliance certification to the Control Officer and to EPA Region IX. The compliance certification report is due on January 31st of each year (covering the period January 1st through December 31st of the previous year). The first report due after permit issuance may not cover a 12-month period. (See VII of Part A for detailed information on this report).
2. For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any standard in this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. [40 CFR 60.11(g)]

D. Emission Inventory Reporting

Every source subject to a permit requirement shall complete and submit an annual emissions inventory questionnaire when requested by the Control Officer. The questionnaire is due by March 31st, or 90 days after the Control Officer makes the inventory form available, whichever occurs later, and shall include emission information for the previous calendar year. These requirements apply whether or not a permit has been issued and whether or not a permit application has been filed. (See VI of Part A for additional information on this report). [PCC 17.12.320]

[Locally Enforceable Condition]

Attachment 1

Applicable Regulations

Requirements Specifically Identified as Applicable:

Code of Federal Regulations Title 40:

Part 60 Subpart LL	New Source Performance Standards (NSPS) for Metallic Mineral Processing Plants
Part 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
Part 64	Compliance Assurance Monitoring (CAM)
Part 63 Subpart CCCCCC	National Emission Standards for Hazardous Air Pollutants for Gasoline-Dispensing Facilities

Pima County State Implementation Plan (SIP):

Rule 224	Fugitive Dust producing Activities
Rule 314	Petroleum Liquids
Rule 315	Roads and Streets
Rule 316	Particulates Materials
Rule 321	Opacity Standards and Applicability
Rule 332	Compilation of Mass Rates and Concentrations
Rule 343	Visibility Limiting Standard
Rule 314	Petroleum Liquids

Pima County Code (PCC) Title 17, Chapter 17.16:

17.16.020	Noncompliance with Applicable Standards
17.16.040	Visible Emission Standards: Standards and applicability (Include NESHAP)
17.16.050	Visibility Limiting Standards
17.16.060	Fugitive Dust Producing Activities
17.16.090	Roads and Streets
17.16.100	Particulate Materials
17.16.110	Storage Piles
17.16.120	Mineral Tailings
17.16.130	NSPS Applicability
17.16.140	Compilation of mass rates and concentrations
17.16.160	Standards of Performance for Fossil-Fuel Fired Steam Generators and General Fuel Burning Equipment
17.16.340	Standards of Performance for Stationary Rotating Machinery
17.16.360	Standards of Performance for Nonferrous Metals Industry Sources
17.16.230	Standards of Performance for Storage Vessels for Petroleum Liquids

Attachment 2

Equipment List

Table 1 Mission Primary Crushing								
Name (Equipment ID)	Emission Point	Type	Make	Model	Serial Number	Date of Manufacture	Design Capacity	NSPS Applicable
Primary Crusher (M303-E3)	SSOPM-1	Gyratory, water sprays@ dump pocket	Traylor 54 X 60 inch	TC	77200	6/61	400 HP, 2,290 TPH	N
Apron Feeders (M303-E4 and E5)	HFOPM-1	Pan	Stephens Adamson	SA Aurora 11945-LA	M-2162-2 (both feeders)	6/61	40 HP, 2,290 TPH for 2 feeders	N
Wearbelt (M303-E9)	SSOPM-1	60 inch, spray bar @ conveyor head	N/A	N/A	N/A	6/61	50 HP, 2,290 TPH	N
Wet Scrubber (303-21)	SSOPM-1	UW-4	Ducon	Size 108	N/A	Prior to August 25, 1982	125 HP, 41,503 AWCfm	N
Conveyor (M309-E1)	HFOPM-2	Type-60inch, water spray used at wearbelt conveyor drop point and multiple spray bars at Intermediate Ore Storage drop point. Sprays also at drivehouse.	N/A	Stacker	N/A	6/61	900 HP, 2,290 TPH	N
Vibratory Feeders (V305-E1 through E6)	SSOPM-2	Water sprays located at each feeder.	Syntron	F86-D	110324 through 110328 and 358093	6/61	13 HP, 328 TPH	N
Wet Scrubber (305-07a)	SSOPM-2	N	Beu-Math Engineering	N/A	288200	2011	11,000 CFM	Y
Conveyor to Secondary Crusher (M309-E2 and M309-E-6)		42 inch	TBD	TBD	TBD	2011	1750 TPH	Y

Table 2 Mission Secondary / Tertiary Crushing

Name (Equipment ID)	Emission Point	Type	Make	Model	Serial Number	Date of Manufacture	Design Capacity	NSPS Applicable
Double Deck Screens (M307-E1 and M307-E2)		10 foot X 20 foot	Svedala	Double Deck X H Low Head	N/A	1998	75 HP, 1,300 TPH	Y
Secondary Crusher (M307-E3 and M307-E4)		Standard Crusher, Fine Crushing	Nordberg	MP800	MP800	1998	800 HP, 1,500 TPH	Y
Double Deck Screens (M307-E5 and M307-E6)		8 foot x 20 foot Spray bars located at drop points to conveyor M307-E21	Svedala	Double Deck Low Head	N/A	1998	40 HP, 800 tons Hour	Y
Conveyor (M307-E21)		42 inch, Water spray heads @ transfer tower	N/A	Single Deck Oversize	N/A	8/90 (modified)	200 HP, 1,968 TPH	Y
Conveyor (M307-E23)		42 inch, Water Spray @ drop point from M307-E21	N/A	N/A	N/A	8/90 (modified)	250 HP, 1,968 TPH	Y
Surge Bin (307-E8, 307-E9 and 307-E51)		Tertiary feed	N/A	N/A	N/A	Prior to Aug. 25, 1982	500 Live Tons	Y (307-E8 and 307-E-9)
Vibratory Feeders (V307-E10, E11, E52)		Vibratory	Syntron	F86-D	11246, 11247, 237667	6/61, 6/61, 2/67	13 HP, 656 HP	N
Feed Conveyor (M307-E24, E25, E53)		Retractable	N/A	N/A	N/A	8/93 (modified)	10 HP, 656TPH	Y
Tertiary Crusher (307-E12, 307-E13, M307-E54)		7 foot fine crushing	Nordberg	MP800	MP800-107, MP800-108, MP800-109,	1998	800 HP, 656 TPH	Y

Table 2 Mission Secondary / Tertiary Crushing

Name (Equipment ID)	Emission Point	Type	Make	Model	Serial Number	Date of Manufacture	Design Capacity	NSPS Applicable
Double Deck Screens (M307-E14, E15, E55)		8 x 20 foot	Svedala	Double Deck Low Head	N/A	1998	40 HP, 656 TPH	Y
Double Deck Conveyor (M307-E16)		48-inch	N/A	Double Deck	N/A	8/93 (modified)	75 HP, 2,500 TPH	Y
Wet Scrubber (307-104 through 307-107)	SSOPM-4 SSOPM-5 SSOPM-6 SSOPM-7	UW-4	Ducon	Size 108	66-424-A, 66-424-B, 65-135B, N/A	Prior to Aug 25, 1982	125 HP, 28, 613 SCFM (1 spare on stand-by)	Y
Wet Scrubber (307-108a)	SSOPM-3		Beu-Math Engineering	Size 1500-STD	198202	7/2011	10,000 CFM	Y
Wet Scrubber (307-108b)	SSOPM-3	Back-up to 307-108a	Beu-Math Engineering	Size 1500-STD	TBD	TBD	10,000 CFM	Y
Feed Conveyor (M307-E13)		Spray bar @ conveyor tail end.	N/A	N/A	N/A	8/93	500 HP, 2,500 TPH	Y
Reed Conveyor (M307-E44)		Fine Ore Bins Conveyor	N/A	N/A	N/A	1988 Extend	HP (TBD), 2,500 TPH	Y
Wet Scrubber (309-100)	SSOPM-19	K1	American Air Filter	Roto Clone Size 19, Part No. 13455-21	K600206	Prior to Aug 25, 1982	25 HP/intermittent use	N
Tripper Car (M311-E45)	SSOPM-13	Fabricated by Cimetta Engineering	Cimetta Engineering	N/A	N/A	6/61	5 HP, 2,500 TPH	N
Fine Ore Bins (6) (310-01)		Fine Ore storage	N/A	N/A	N/A	Approx. 1960	15,700 tons-live storage capacity	N
Fine Ore Feeder Belts (311-1, 311-24, 311-60, 311-71)		36 inch, Fixed and Variable speed conveyors	N/A	N/A	N/A	6/61, 2/67	3 hp, 100-130 tph, (12) Variable Speed 50 Tons/hour (24) fixed speed	N

Table 2 Mission Secondary / Tertiary Crushing

Name (Equipment ID)	Emission Point	Type	Make	Model	Serial Number	Date of Manufacture	Design Capacity	NSPS Applicable
Conveyor (M311-E25 Through M311-E28, M311-E72, M311-E73)		30inch	N/A	N/A	N/A	6/61, 2/67	3 HP, 350 TPH	N
Conveyor (M311-E29, M311-E32, M311-E74, M311-E75)		Rod Mill Feed	N/A	N/A	N/A	6/61, 2/67	5 HP, 350 tons/hour	N
Dust Collectors (M311-E37)	SSOPM-8	Dry	Wheelabrator/Scientific Insert	112-D	A111115	Approx. 1960 (Refurbished in 2009)	7500 AWCfm	Y
Dust Collectors (M311-E38, M311-E39, and M38-E40 M311-E78, M311-E79)	SSOPM-9 through SSOPM-13	Dry	FARR	GS4	882507001	Approx. 1960 (Refurbished in 2009)	2750 AWCfm	Y
Wet Scrubber (311-109 through 311-111)	SSOPM-14 SSOPM-15 SSOPM-16	UW-4	Ducon	Size 66	C91-1100	Prior to Aug. 25,1982	75 HP, 10,283 SCFM	N
Fine Ore Bin (311-126)		Steel	Fabricated	Custom built	N/A	?/99	5,00 tons	Y
Belt Feeder (311-121)		30 inch belt	Fabricated	Custom built	N/A	?/99	15 HP, 7500 tons/hour	Y
Belt Feeder (311-122)		30 inch belt	Fabricated	Custom built	N/A	?/99	15 HP, 750 tons/hour	Y
Belt Feeder (311-123)		30 inch belt	Fabricated	Custom built	N/A	?/99	15 HP, 7500 tons/hour	Y
Belt Feeder (311-124)		30 inch belt	Fabricated	Custom built	N/A	?/99	15 HP, 750 tons/hour	Y

Table 3 North Crusher

Name (Equipment ID)	Emission Point	Type	Make	Model	Serial Number	Date of Manufacture	Design Capacity	NSPS Applicable
Pan Feeder (316-05)		72 inch x 58 foot x ¾ inch water sprays at dump pocket	NICO(National Iron Company)	FD-7F08	N/A	2/89 (modified)	60 HP, 625 TPH	N
Conveyor (361-05A)		Dribble	Goodyear	N/A	N/A	Prior to Aug. 25, 1982	1 TPH	N
Crusher (361-02A)		60 x 48 inch	Allis Chalmers	Jaw	B-47300	5/73	200 HP, 15,00 ton/day	N
Gathering Conveyor (361-07)		42 inch, wear	N/A	Jaw Undersize	N/A	5/73	15 HP, 625 TPH	N
Wet Scrubber (362-5-3, 362-6-3, 362-7-3)	SSOPN-1 SSOPN-2 SSOPN-3	48 inch	Ducon	Size 108	65-135C, 65- 135D, 65-135E	Prior to Aug. 25, 1982	25 HP, 312 TPH	N
Conveyor 361-08				N/A	N/A	5/73	625 TPH	N
Conveyor 361-10				Variable Feed	N/A	5/73	312 TPH	N
Conveyor 361-12				Variable Feed	N/A	5/73	312 TPH	N
Norblo Dust Arrestor 361-46	SSOPN-4	Dry	Morblo	540-A	N/A	1973	144000 CFM	N
Conveyor (361-15)		36 inch	N/A	Gathering Conveyor	N/A	5/73	15 HP, 625 TPH	N
Crusher Feed Conveyor (316-16)		36 inch, Water spray located midway on belt	N/A	Crusher Feed	N/A	5/73	50 HP, 650 TPH	N
Screen (361-24)		6 x 12 foot	Simplicity	Double Deck	2612-11014- AX-6-100	5/73	25 HP, 650TPH	N
Standard Crusher (361-26-1)		7 foot	Symons	Standard	7726	5/73	300 HP, 443 TPH	N

Table 3 North Crusher

Name (Equipment ID)	Emission Point	Type	Make	Model	Serial Number	Date of Manufacture	Design Capacity	NSPS Applicable
Gathering Conveyor (361-28)		42 inch, water spray located at head end of conveyor	N/A	Standard Crusher Discharge	N/A	5/73	15 HP, 433 TPH	N
Feed Conveyor (361-29)		42 inch, water spray bar located near tail end of conveyor	N/A	Transfer Tower Feed	N/A	5/73	15 HP, 443 TPH	N
Feed Conveyor (361-30)		42 inch, water spray at drop point from 361-29	N/A	Tertiary Head Hopper	N/A	5/73	75 HP, 443 TPH	N
Head Hopper (361-31)		Screen Feed	N/A	N/A	N/A	Approx. 1973	Loading Rate=1,000 TPH	N
Conveyor (361-32 and 361- 33)		48 inch	N/A	Feeder Conveyor	N/A	5/73	7.5 HP, 443 TPH	N
Screens (2) (361-34and361-36)		6 x 14 foot	Simplicity	Double Deck	2616- 11014AX-6- 101-S and2616- 11014AX-6- 102-S	5/73	30 HP, 443 TPH	N
Conveyor (361-37)		30 inch	N/A	Shorthead Feed	N/A	5/73	10 HP, 382 TPH	N
Crusher (361-38-1)		7 foot	Symons	Shorthead	7756	5/73	300 HP, 382 TPH	N
Conveyor (361-40)		30 inch	N/A	Double Deck Undersize Gathering	N/A	5/73	15 HP, 625 TPH	N
Mill Transfer Belt (361-42)		36 inch, water spray located at tail end of belt	N/A	Transfer	N/A	2/89	125 HP, 600 TPH	Y
Feed Belt (361-47 and 361- 48)		48 inch	N/A	Reversible Fine Ore Bins	N/A	8/93	15 HP, 7,500 TPH (each belt)	Y

Table 3 North Crusher								
Name (Equipment ID)	Emission Point	Type	Make	Model	Serial Number	Date of Manufacture	Design Capacity	NSPS Applicable
Fine Ore Bins (2) (310-03)		Fine Ore Storage	N/A	N/A	N/A	Approx. 1989	15,700 tons-live storage capacity	Y
Ball Mill Feeders (311-87 through 311-90)		Vibrating, fine Ore bins	Syntron	F-480	N/A	2/89	3.5 HP, 150 TPH	Y
Feeder belts (311-85, 311-86, 311-91, 311-92)		36inch	N/A	N/A	N/A	2/89	3.5 HP, 150 TPH	Y
Gathering Belts (311-93, 311-93A, 311-94)		30 inch	N/A	N/A	N/A	2/89	15 HP, 150 TPH	Y
Feeder Belts (311-95, 311-96)		30 inch	N/A	N/A	N/A	2/89	15 HP, 300 TPH	Y
Dust Collector (311-99)	SSOPN-6	1005-10 "C"	Mikro-Pulsaire Baghouse	1005	880498111	Approx. 1972	25 HP, AWCFCM=6,312	Y
Wet Scrubber (311-101)	SSOPN-7	UW-4	Ducon	III, Size 84	C72-367	Approx. 1972	60HP, 16,899 SCFM	Y

Table 4 South Crusher								
Name (Equipment ID)	Emission Point	Type	Make	Model	Serial Number	Date of Manufacture	Design Capacity	NSPS Applicable
Crusher (10-101)	HFOPS-1	54 x 74 inch, water spray at dump pocket	Allis-Chalmers	Gyratory	B-38040	1/72	500 HP, 2,000 TPH	N
Feeder (10-102)		72 inch	NICO (National Iron Company)	Apron	8497-285	1/72	30 HP, 2,000 TPH	N
Wet Scrubber (10-108)	SSOPS-1	UW-4	FARR Cartridge Dust Collector	Size 96	C70-356	Approx. 1970	100 HP, 22,801 SCFM	N
Conveyer (10-103)		54 inch	N/A	N/A	A/A	1/72	500 HP, 2,000 TPH	N

Table 4 South Crusher

Name (Equipment ID)	Emission Point	Type	Make	Model	Serial Number	Date of Manufacture	Design Capacity	NSPS Applicable
Wet Scrubber (10-114)	SSOPS-2	UW-4	Ducon	Size 42	C-90-1045	Approx. 1970	20 HP, 4,471 SCFM	N
Radial Stacker (10-105)	HFOPS-2	54 inch X 585 feet, water spray heads at head end of belt-discharge to stockpile	Barber Greens	G.O. 201008	N/A	1/72	350 HP, 2,000 TPH	N
Feeders (30-130, 30-131, 30-132, 30-133)		42 inch	NICP (National Iron Company)	FD-4465	FD-4465-293, through FD-4465-296	1/72	7.5 HP, 500 TPH	N
Conveyor (30-134, 30-136)		48 inch, SAG Conveyor	N/A	N/A	N/A	6/14/70	150 HP, 1000 TPH EACH	N
Wet Scrubber (20-256)	SSOPS-3	UW-4	Ducon	72	C70-356	12/11/70	75 HP, 14,500 CFM	N
Stockpile Feed Conveyor (20-250)		36 inch, X 1,035 feet, SAG Recycle	N/A	N/A	N/A	Prior to Aug. 25, 1982	600 TPH	N
Vibrating Feeders (20-252, 20-253, 20-254)		42 x 60 inch, Vibrating, SAG Recycle	FMC Syntron	F-450-B-DT	657887, 657889, 657891	10/89	10 HP, 200 TPH-total	Y
Stockpile Reclaim Conveyor (20-251)		36 inch X 350 feet, SAG recycle	N/A	N/A	N/A	10/89	20 HP, 200 TPH	Y
Surge Bin Feed Conveyor (20-255)		54 inch X 408 feet, SAG recycle, water spray head at tail end	N/A	N/A	N/A	10/89	10 HP, 200 TPH	Y
Surge Bin (20-257)		SAG recycle	N/A	N/A	N/A	10/89	200 TPH	Y
Belt Feeder Bypass (Omnione)(20-285)		30 inch X 20 feet	N/A	N/A	N/A	10/89	3 HP, 200 TPH	Y
Omnicone Belt Feeder (20-258, 20-259)		30 inch X 20 feet	N/A	N/A	N/A	10/89	3 HP, 200 TPH	Y

Table 4 South Crusher								
Name (Equipment ID)	Emission Point	Type	Make	Model	Serial Number	Date of Manufacture	Design Capacity	NSPS Applicable
Omni Cone Crusher (20-262, 20-263)		5 foot w/ medium bowl	Rexnord	1560	1560 0323 C3017 7089, 1560 0322 C3017 70086	10/89	250 HP, 200 TPH	Y
Wet Scrubber (20-270)	SSOPS-4	UW-4, SAG recycle	Duncon	IV-Soze66	C90-1045	8/90	13,000 CFM	Y
Omnicone Discharge Conveyor (20-265)	SSOPS-5	36 inch X 500 feet, water spray heads at tail end of conveyor, SAG recycle	N/A	N/A	N/A	10/89	50 HP, 200 TPH	Y
Grizzly Oversize Conveyor (20-244 and 20- 245)						1/72	100 TPH	Y
Recycle Conveyor (20-266, 20-268)		36 inch, SAG recycle	N/A	N/A	N/A	1/72	10 HP, 100 TPH	Y

Table 5 Lime Handling								
Name (Equipment ID)	Emission Point	Type	Make	Model	Serial Number	Date of Manufacture	Design Capacity	NSPS Applicable
Mission Mill Lime Bin Collector (328-E6)	SSOPM-17	Baghouse, Dry	Mikro- Pulsaire	16S-8-30B	992020H1	1999	3 HP, 1500 CFM	N
South Mill Lime Bin Dust Collector (60-502)	SSOPS-6	Baghouse, dry, Pulsed Air	Mikro- Pulsaire	36S-8-30	72H2304	2/15/73	25 HP, 3,000 ACFM	N
Mission Mill Lime Feeder Conveyor (HFOPM-5)		Dry lime handling, 36 inch X 55 foot belt	N/A	N/A	N/A	1960	Varies, only runs on 8 hour day, intermittent feed	N

Table 5 Lime Handling

Name (Equipment ID)	Emission Point	Type	Make	Model	Serial Number	Date of Manufacture	Design Capacity	NSPS Applicable
Mission Mill Lime Feed to Bucket Elevator Conveyor (328-E3)		24 inch X 32 foot belt	N/A	N/A	N/A	1960	Varies, only runs on 8 hour day, intermittent feed	N
Mission Mill REX Bucket Elevator (328-E9)		Lime	Chain Belt Company	N/A	N/A	Approx. 1960	Varies, only runs on 8 hour day, intermittent feed 0-8 tons/hour	N
Mission Mill Lime Feed Conveyor (328-E11)		20 inches X 37 foot belt	N/A	N/A	N/A	Approx. 1960	0-8 Tons/hour, Varies, Intermittent feed	N
Mission Mill Lime Hopper		Lime	N/A	N/A	N/A	Approx. 1960	40tons	N
Mission Mill Lime Feeder (328-E44)	SSOPM-18	F33D1, style 018551	Syntron	C-54490	112501	Approx. 1960	0-8 tons/hour, Varies, Intermittent feed	N
Mission Mill Dry Lime Bin		Dry Lime	N/A	N/A	N/A	Approx. 1960	Approx. 250 tons	N
South Mill Lime Bin (60-500)		Dry Lime Storage	N/A	N/A	N/A	Approx. 1972	100 tons	N
South Mill Lime Belt (60-600)		24-inch, Lime Transport	N/A	N/A	N/A	Approx. 1972	0-4 tons/hour	N
South Mill Lime Bin Vibratory Feeder (60-601)		Vibra Flow	Syntron	V-20	12277	Approx. 1972	0-4 ton/hour, Varies, Intermittent feed	N

Table 6 By Products Plant

Name (Equipment ID)	Emission Point	Type	Make	Model	Serial Number	Date of Manufacture	Design Capacity	NSPS Applicable
Screw Dryer (353-113)		Natural Gas Fired	Maxon Burner	N/A	N/A	2012	3,000,000 BTU 2,000 lb./hour	N
Screw Dryer (353-114)		Natural Gas Fired, standby dryer for 353-113	N/A	N/A	N/A	Approx. 1981	3,000,000 BTU 2,000 lb./hour	N
Wet Dust Collector (353-115)	SSMP-1	UW-4, Stainless Steel	Ducon	IV-High Efficiency	Contract #C80- 0706	1980	15,000 cfm	N
Screw Dryer Holding Hopper (353-119)		Molybdenum concentrate	Fabricated on site	N/A	N/A	Approx. 1978	2,000 lbs./hour	N
Screw Dryer Holding Hopper (353-120)		Molybdenum concentrate	Fabricated on site	N/A	N/A	Approx. 1981	2,000 lbs./hour	N
Product Bagging System (353-121)			TBD	TBD	TBD	2012	2000 lbs/hour	N

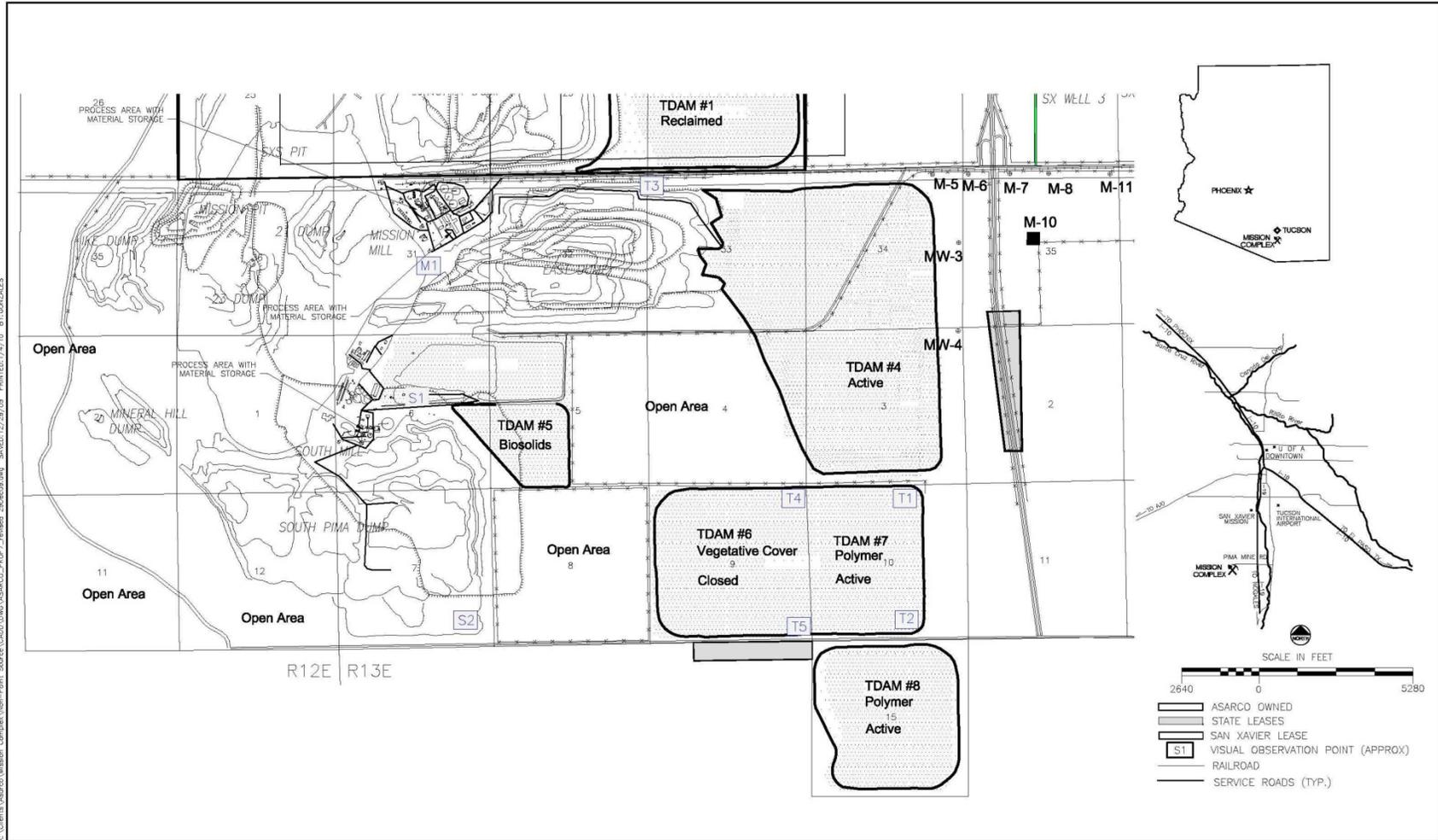
Table 7 Generators								
Name (Equipment ID)	Emission Point	Fuel Type	Make	Model	Serial Number	Date of Manufacture	Design Capacity	NSPS Applicable
Power Generator (23-001)	NA	V-12 diesel	Detroit Diesel	12V-71	N/A	N/A	350 KW, 500 HP	N
Power Generator (23-002)	NA	V-12 diesel	Detroit Diesel	12V2000	N/A	N/A	750 KW, 1,100 HP	N
Power Generator (23-003)	NA	Diesel	Detroit Diesel	16V149	N/A	N/A	1,500 KW, 2,200 HP	N

Table 8 NESHAP Applicable Generator								
Name (Equipment ID)	Emission Point	Fuel Type	Make	Model	Serial Number	Date of Manufacture	Design Capacity	Applicable NESHAP Subpart
Emergency Generator	NA	Diesel	Cummins	KTA-1150-G5	31121056	01/1981	365 KW, 489 HP	ZZZZ

Table 9 NESHAP Applicable Gasoline Dispensing Facility			
Name (Equipment ID)	Design Capacity	Monthly Throughput	Applicable NESHAP Subpart
Gasoline Storage Tank	20,000 gallons	< 10,000 gallons	CCCCC

Attachment 3

Site and Visual Observation Map



JUNE 2007



FIGURE 1
SITE AND VISUAL OBSERVATION MAP
ASARCO MISSION COMPLEX

Attachment 4

Schedule of Performance Tests (To Be Determined by PDEQ and ASARCO LLC following Source Review)

Section 1: Mission Primary Crusher and Stockpile

Equipment Name	Unit I.D.	Description	Group I.D.
SSOPM-1	303-21	Ducon 108 Wet Scrubber	I
SSOPM-2	305-07a 305-07b	Beu-Math Hydrostatic Precipitator (NSPS)	II

Section 2: Mission Secondary Crusher

Equipment Name	Unit I.D.	Description	Group I.D.
SSOPM-3	307-108a/b	Beu-Math Eng Wet Scrubber (NSPS)	III
SSOPM-4	307-104	Ducon 108 Wet Scrubber (NSPS)	IV
SSOPM-5	307-105	Ducon 108 Wet Scrubber (NSPS)	IV
SSOPM-6	307-106	Ducon 108 Wet Scrubber (NSPS)	IV
SSOPM-7	307-107	Ducon 108 Wet Scrubber (NSPS)	IV
SSOPM-19	M309-100	American Air Filter Wet Scrubber	V

Section 3: Mission Concentrator

Equipment Name	Unit I.D.	Description	Group I.D.
SSOPN-6	311-99	Micropul Baghouse (NSPS)	VI
SSOPN-7	311-101	Ducon Dynamic Wet Scrubber	VII
SSOPM-8	M311-E37	Wheelabrator Dry Dust Collector (NSPS)	VIII
SSOPM-9	M311-E38	Wheelabrator Dry Dust Collector (NSPS)	IX
SSOPM-10	M311-E39	Wheelabrator Dry Dust Collector (NSPS)	IX
SSOPM-11	M311-E40	Wheelabrator Dry Dust Collector (NSPS)	IX
SSOPM-12	M311-E41	Wheelabrator Dry Dust Collector (NSPS)	IX
SSOPM-13	M311-E42	Wheelabrator Dry Dust Collector (NSPS)	IX
SSOPM-14	311-109	Ducon Dynamic Wet Scrubber	X
SSOPM-15	311-110	Ducon Dynamic Wet Scrubber	X
SSOPM-16	311-111	Ducon Dynamic Wet Scrubber	X
SSOPM-17	328-E6	Micro Pulsaire Dry Dust Collector	XI

Section 4 Mission North Primary Crusher and Stockpile

Equipment Name	Unit I.D.	Description	Group I.D.
SSOPN-1	362-5-3	Ducon Wet Scrubbers	XII
SSOPN-2	362-6-3	Ducon Wet Scrubbers	XII
SSOPN-3	362-7-3	Ducon Wet Scrubbers	XII
SSOPN-4	361-46	Norblo Baghouse Dust Collector	XIII

Section 5 Mission South Primary Crusher and Stockpile

Equipment Name	Unit I.D.	Description	Group I.D.
SSOPS-1	10-108	Ducon Wet Scrubber	XIV
SSOPS-2	10-114	Ducon Wet Scrubber	XV

Section 6 Mission South Concentrator

Equipment Name	Unit I.D.	Description	Group I.D.
SSOPS-6	60-502	Micro-Pulsaire Dust Collector	XVI
SSOPS-3	20-256	Ducon Dynamic Wet Scrubber	XVII
SSOPS-4	20-270	Ducon Dynamic Wet Scrubber	XVIII

Section 7 By-Product (Molybdenum) Plant

Equipment Name	Unit I.D.	Description	Group I.D.
SSMP-1	353-115	Ducon Wet Dust Collector	XIX